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     (FILE 'HOME' ENTERED AT 11:43:50 ON 04 JAN 2007)

     FILE 'CAPLUS, MEDLINE' ENTERED AT 11:44:08 ON 04 JAN 2007
L1           77 S CHITOSAN? (P) SALT? (P) SPRAY?
L2           32 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER?
L3           12 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER? (P) DRY?
L4            9 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER? (P) DRIED
L5            1 S CHITOSAN? (P) SALT? PARTICLES  (P) SPRAY?
L6            2 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE (P) SPRAY?
L7           11 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE
L8           11 S CHITOSAN? (P) ?SALT? (P) BLOOD PRESSURE
L9           77 S CHITOSAN? (P) ?SALT? (P) SPRAY?
L10          31 S CHITOSAN? (P) ?SALT? (P) SPRAY? (P) DRY?
L11          19 S L10 NOT L3
L12          46 S L9 NOT L10
L13           0 S L12 AND ADHER?
L14           2 S L12 AND BIND?
L15          45 S L12 AND ON SALT?
L16           0 S L12 AND "ON SALT"
L17           0 S L12 AND "SPRAYING CHITOSAN"
L18           0 S L12 AND "SPRAYING THE CHITOSAN"
L19           0 S L12 AND "SPRAYED THE CHITOSAN"
L20          10 S L12 AND CHITOSAN-SALT?
L21          35 S L15 NOT L20
L22          36 S L12 NOT L20
L23         333 S CHITOSAN-CONTAIN?
L24           0 S CHITOSAN-CONTAIN? SALT?
L25           0 S ?CHITOSAN-CONTAIN? SALT?
L26           1 S ?CHITOSAN-SALT? (P) BLOOD PRESSURE?
L27          12 S ?CHITOSAN-SALT? (P) SPRAY? ON
L28           0 S ?SALT? BOUND TO CHITOSAN?
L29           0 S ?SALT? CONTAIN? CHITOSAN?
L30           0 S ?CHITOSAN-CONTAIN? COMPOUND?
L31           5 S ?CHITOSAN-CONTAIN? COMPO?
L32           0 S ?CHITOSAN-SALT COMPO?
L33           0 S ?CHITOSAN-SALT MIXTURE?
L34         182 S ?CHITOSAN-LACTATE?
L35          15 S L34 AND SPRAY?
L36           4 S L35 AND DRY?
L37           4 S L35 AND DRIED
L38          11 S L35 NOT L36
L39           8 S L38 NOT L37
L40         330 S ?CHITOSAN-SALT?
L41           2 S L40 AND SALT PARTICLES?
L42          26 S L40 AND SPRAY?
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L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1277288 CAPLUS
TITLE: Salt resistance and its mechanism of cucumber under effects of exogenous chemical activator
AUTHOR(S): Song, Shiqing; Liu, Wei; Guo, Shirong; Shang, Qingmao; Zhang, Zhigang
CORPORATE SOURCE: Department of Horticulture and Gardening, Hebei Normal University of Science and Technology, Changli, 066600, Peop. Rep. China
SOURCE: Yingyong Shengtai Xuebao (2006), 17(10), 1871-1876
CODEN: YSXUER; ISSN: 1001-9332
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB With root injection and foliar spray, this paper studied the effects of different concns. salicylic acid, brassinolide, chitosan and spermidine on the growth, morphogenesis, and physiol. and biochem. characters of cucumber (Cucumis sativus L.) seedlings under 200 mmol · L-1 NaCl stress. The results showed that at proper concns., these four exogenous chemical activators could markedly decrease the salt stress index and mortality of cucumber seedlings, and the decrement induced by 0.01 mg · L-1 brassinolide was the largest, being 63.0% and 75.0%, resp. The activities of superoxide dismutase (SOD), peroxidase (POD) and catalase (CAT) increased significantly, resulting in a marked decrease of malondialdehyde (MDA) content and electrolyte leakage. The dry weight water content and morphogenesis of cucumber seedlings improved, and the stem diameter, leaf number, and healthy index increased significantly. All of these suggested that exogenous chemical activators at proper concns. could induce the salt resistance of cucumber, and mitigate the damage degree of salt stress. The salt resistance effect of test exogenous chemical activators decreased in the sequence of 0.005 .apprx. 0.05 mg · L-1 brassinolide, 150 .apprx. 250 mg · L-1 spermidine, 100 .apprx. 200 mg · L-1 chitosan, and 50 .apprx. 150 mg · L-1 salicylic acid.

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:752406 CAPLUS
DOCUMENT NUMBER: 145:187492
TITLE: Film-forming liquid composition for preservation of salted pork in jelly
INVENTOR(S): Chang, Zhongyi; Zhao, Ning; Wang, Chunsheng
PATENT ASSIGNEE(S): Nanjing Yurun Food Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1806567	A	20060726	CN 2006-10038056	20060126

PRIORITY APPLN. INFO.: CN 2006-10038056 20060126

AB The title liquid composition comprises food-grade lactic acid 0.8-2%, chitosan 0.8-1.2%, nisin 0.008-0.012%, and water as balance. The composition is sprayed onto salted pork in jelly and can form a preservative film after air-drying, which can destroy microbial enzyme system, prohibit microbial respiration, and kill bacteria by influencing cell wall permeability and prohibiting synthesis of cell wall. With the preservative film, the storage life of salted pork in jelly at 0-4°C is prolonged for about 15 days without adverse effect on the appearance and taste of salted

pork in jelly.

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723693 CAPLUS
DOCUMENT NUMBER: 145:165999
TITLE: Method for manufacturing chitosan-containing toasted laver
INVENTOR(S): Jung, Bong Im
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050265	A	20040616	KR 2002-78050	20021210
PRIORITY APPLN. INFO.:			KR 2002-78050	20021210

AB A method for manufacturing chitosan containing toasted laver is used to improve taste, flavor, and nutrients of toasted laver and to enhance health benefits. Manufacture comprises the steps of: drying fresh laver to a water content of 15-18%; covering the dried laver with mixed oil consisting of 80-90% soybean oil and 10-20% sesame oil; toasting the oil-covered laver at 180-220° for 3-7 s; covering the first toasted laver with the mixed oil; drying crustacean shells at 40-60° for 4-5 h and pulverizing to obtain a chitosan powder; spraying the chitosan powder and salt on the toasted laver; toasting the chitosan- and salt-sprayed laver at 280-320° for 3-7 s; and cutting and packaging the toasted laver.

L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:47114 CAPLUS
DOCUMENT NUMBER: 144:240009
TITLE: Reverse temperature sensitive in-situ formation type implanting agent for injection
INVENTOR(S): Lin, Ying; Zhu, Dequan; Ding, Fuxin; Zan, Jia; Jiang, Guoqiang
PATENT ASSIGNEE(S): Tsinghua University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1631357	A	20050629	CN 2004-10009786	20041112
PRIORITY APPLN. INFO.:			CN 2004-10009786	20041112

AB The process comprises dissolving or suspending the cellulose derivative salting-out salt in release sustaining/controlling microencapsulating material solution, spray drying to obtain microencapsulated salt; dissolving the cellulose derivative, polyethylene glycol, and the microencapsulated salt in water to the concentration of 1-3.5, 1-15, and 1-30%, resp., sterilizing, and freeze drying. The cellulose derivative is hydroxypropyl cellulose, hydroxypropyl Me cellulose, Et hydroxyethyl cellulose, and/or Me cellulose. The salt is chloride, phosphate, sulfate, lactate, or citrate. The microencapsulating material is Na CM-cellulose, hydroxypropyl Me cellulose, cellulose acetate, Et cellulose, cellulose acetate phthalate, acrylic resin, gelatin, and/or chitosan.

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:414487 CAPLUS
DOCUMENT NUMBER: 142:487632
TITLE: Hydrotalcite-based blood purifying adsorbent and its preparation
INVENTOR(S): Ye, Ying; Zheng, Libo; Wang, Pu; Shen, Zhongyue; Zhong, Huaiyang
PATENT ASSIGNEE(S): Zhejing University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1431043	A	20030723	CN 2003-115015	20030120

PRIORITY APPLN. INFO.: CN 2003-115015 20030120

AB The blood purifying adsorbent, a chitosan or gelatin-like substance-encapsulated hydrotalcite-[M1- xIIMIIIx(OH)2]Ax mH2O (MII = Mg2+, Zn2+, Fe2+, or other divalent metal ion; MIII = trivalent metal ion; A = Cl- or NO3-; and x = 0.2-0.33), is prepared by adding hydrotalcite in 1-8% chitosan-1-8% gelatin-like substance solution, heating at 30-60°C for 2-6 h under bubbling N2, spraying into 0.1-5% NaOH solution to solidify, separating, washing, and vacuum drying. The gelatin-like substance is gelatin, agar, and/or agarose. The hydrotalcite is prepared by dissolving Mg salt and Al salt in water to obtain 0.5-1.0M Mg salt-0.2-0.5M Al salt solution, co-dropping with 1.5-2.5M NaOH solution in water under bubbling N2, stirring at 50-80°C for 10-24 h, vacuum drying, and grinding to <200 mesh. The Mg salt is MgCl2 or Mg(NO3)2. The Al salt is AlCl3 or Al(NO3)3.

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp. CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519

EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217
PRIORITY APPLN. INFO.:			KR 2003-31616	A 20030519
			WO 2004-KR410	W 20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:726046 CAPLUS

DOCUMENT NUMBER: 142:62449

TITLE: Characterization of chitosan acetate as a binder for sustained release tablets

AUTHOR(S): Nunthanid, J.; Laungtana-anan, M.; Sriamornsak, P.; Limmatvapirat, S.; Puttipipatkhachorn, S.; Lim, L. Y.; Khor, E.

CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom, 73000, Thailand

SOURCE: Journal of Controlled Release (2004), 99(1), 15-26
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A chitosan derivative as an acetate salt was successfully prepared by a spray drying technique. Physicochem. characteristics and micrometric properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 μm in diameter The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform IR (FTIR) and solid-state 13C NMR spectroscopy demonstrated the functional groups of an acetate salt in its mol. structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt, heated at 120°C for 12 h, revealed the evidence of the conversion of chitosan acetate mol. structure to N-acetylglucosamine at higher temperature No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% weight/weight SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, resp. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:272084 CAPLUS
DOCUMENT NUMBER: 136:261821
TITLE: Method comprising flocculation clarification and ultrafiltration concentration of producing composite immunoreactive proteins from chicken egg
INVENTOR(S): Yang, Yanjun
PATENT ASSIGNEE(S): Jiangnan Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1312295	A	20010912	CN 2001-108225	20010221
CN 1129609	B	20031203		
PRIORITY APPLN. INFO.:			CN 2001-108225	20010221

AB The process comprises isolating egg yolk from fresh egg; extracting with water at pH 4.8-7.7 for 5-25 min; centrifuging or precipitating for 5-18 h to obtain egg yolk extract; flocculating with 0.2-1.1% flocculant (composed of soluble Ca salt such as Ca(OAc)2 or Ca lactate, chitosan , and phosphate such as Na3PO4 or K3PO4 at a ratio of 0.02-0.3:0-0.12:0.16-0.68) at pH 4.5-8.5 for 5-20 min; standing for 20-60 min; filtering or centrifuging; ultrafiltering with ultrafilter membrane (such as cellulose acetate membrane, modified polysulfone membrane, polyether sulfone membrane, or polyvinylidene fluoride membrane); sterilizing with 0.22 μm ultrafilter membrane; and freezing at -30 to -50°C for 24 h. Fresh eggs are collected from chicken immunized with pathogenic bacteria from human intestine, virus, or caries bacteria. The content of transferrin in the immunoreactive protein was >10%. The isolated chicken immunoreactive proteins comprising Igs. and transferrin are useful as nutrition supplement for infant formula. The method also produces byproducts such as egg-yolk powder and egg-white powder by spray -drying for food purpose.

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:23468 CAPLUS
DOCUMENT NUMBER: 130:100718
TITLE: Toilet seat cleaners containing chitosan and quaternary ammonium salts
INVENTOR(S): Takano, Izumi; Takahashi, Yukiko
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11001700	A	19990106	JP 1997-157205	19970613
PRIORITY APPLN. INFO.:			JP 1997-157205	19970613

AB The cleaners contain chitosan and quaternary ammonium salts, preferably benzalkonium chloride (I). The cleaners are directly sprayed over a toilet seat or used by impregnating cotton, gauze, or nonwoven fabrics with them. The cleaners show long-lasting disinfectant effect. Water 40, glacial acetic acid

0.13, Flonac C 0.25, I 0.1, glycerin 1.0, and EtOH 47.4 weight parts were mixed to give a toilet cleaner. The cleaner showed quick drying property and good antibacterial effect.

L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:690526 CAPLUS
DOCUMENT NUMBER: 123:226085
TITLE: Surface structures and surface-active components in food emulsions
AUTHOR(S): Bergenstaahl, Bjoern; Faeldt, Pia; Malmsten, Martin
CORPORATE SOURCE: INSTITUTE SURFACE CHEMISTRY, Stockholm, S-114 86, Swed.
SOURCE: Special Publication - Royal Society of Chemistry (1995), 156(Food Macromolecules and Colloids), 201-14
CODEN: SROCDO; ISSN: 0260-6291
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review, with 23 refs. Food emulsions are complex mixts., and they usually contain both low-mol.-weight surface active lipids and a versatile range of more or less surface-active proteins and polysaccharides. In systems containing several surface-active components, 3 types of adsorbed layers can be identified, based on how the layers are formed. The properties of these adsorption structures (competitive adsorption, associative adsorption, and layered adsorption) are discussed, and examples demonstrating these ideas in different systems are presented. Competitive adsorption at the air-water interface during spray drying, adsorption of apoproteins to phospholipid surfaces, adsorption of chitosan to bile salt + phospholipid surfaces, adsorption of hydrocolloids to emulsifier surfaces, and other topics are detailed.

L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:635078 CAPLUS
DOCUMENT NUMBER: 115:235078
TITLE: Nonwood fiber-based paper with good printability
INVENTOR(S): Kanayama, Nozomi; Endo, Akitaro
PATENT ASSIGNEE(S): Daifuku Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03167388	A	19910719	JP 1989-308119	19891127
PRIORITY APPLN. INFO.:			JP 1989-308119	19891127

AB The title paper is made from pulps containing bast and/or leaf fibers and water-insol. fibrous CM-cellulose and salts and is coated with chitosan at least on its printing surface. Thus, handsheets (basis weight 40 g/m2) of 90:10 manila hemp fibers and CM-cellulose (degree of substitution 0.33) were sprayed with a .apprx.2% solution of 1:1 chitosan-glycolic acid (dry pickup 0.5%), and dried at 120° on a mirror drum. The sheets had better strength and printability than without CM-cellulose or chitosan.

L3 ANSWER 12 OF 12 MEDLINE on STN
ACCESSION NUMBER: 2004437121 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15342177
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets.
AUTHOR: Nunthanid J; Laungtana-Anan M; Sriamornsak P; Limmatvapirat S; Puttipipatkhachorn S; Lim L Y; Khor E
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of

Pharmacy, Silpakorn University, Nakhon Pathom 73000, Thailand.. jurairat@email.pharm.su.ac.th
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (2004 Sep 14) Vol. 99, No. 1, pp. 15-26.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200503
ENTRY DATE: Entered STN: 3 Sep 2004
Last Updated on STN: 5 Mar 2005
Entered Medline: 4 Mar 2005
AB A chitosan derivative as an acetate salt was successfully prepared by using a spray drying technique. Physicochemical characteristics and micromeritic properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 microm in diameter. The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform infrared (FTIR) and solid-state (13)C NMR spectroscopy demonstrated the functional groups of an acetate salt in its molecular structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt , heated at 120 degrees C for 12 h, revealed the evidence of the conversion of chitosan acetate molecular structure to N-acetylglucosamine at higher temperature. No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% w/w SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, respectively. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723693 CAPLUS
DOCUMENT NUMBER: 145:165999
TITLE: Method for manufacturing chitosan-containing toasted laver
INVENTOR(S): Jung, Bong Im
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050265	A	20040616	KR 2002-78050	20021210

PRIORITY APPLN. INFO.: KR 2002-78050 20021210

AB A method for manufacturing chitosan containing toasted laver is used to improve taste, flavor, and nutrients of toasted laver and to enhance health benefits. Manufacture comprises the steps of: drying fresh laver to a water content of 15-18%; covering the dried laver with mixed oil consisting of 80-90% soybean oil and 10-20% sesame oil; toasting the oil-covered laver at 180-220° for 3-7 s; covering the first toasted laver with the mixed oil; drying crustacean shells at 40-60° for 4-5 h and pulverizing to obtain a chitosan powder; spraying the chitosan powder and salt on the toasted laver; toasting the chitosan- and salt-sprayed laver at 280-320° for 3-7 s; and cutting and packaging the toasted laver.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1106018 CAPLUS
TITLE: Production method of miinsol milk
INVENTOR(S): Suh, Young Hun
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001045675	A	20010605	KR 1999-49042	19991105

PRIORITY APPLN. INFO.: KR 1999-49042 19991105

AB PURPOSE: A method for producing Miinsol milk comprising 72 kinds of foods good for lung and large intestine belong to metal among the five elements(metal, wood, water, fire, and earth), with calcium, chitosan and extract of pine needles or sprouts is provided, to improve physical health and constitution and prevent or treat geriatric diseases. The 72 kinds of foods can be classified according to the five elements(metal, wood, water, fire, and earth), the five cardinal colors(blue, red, yellow, white, and black) and the five tastes(the sweet, sour, salty, bitter, and pungent tastes). CONSTITUTION: The method is characterized by the following steps of: (i) steaming a powdered mixture of the 72 kinds of foods for 2hr and passing through a roller to mash fibroid material of the mixture; (ii) aging the prepared materials in an extra basket at 50-60deg.C for 72hr with spraying herb extract occasionally and steaming for 4hr; (iii) repeating the processes of aging and steaming one more time; (iv) extracting the steamed materials at 20-50deg.C and adding milk to the extract; and then (v) getting Miinsol

milk by mixing calcium, chitosan and extract of pine needles or sprouts with the mixture of milk and the extract. The 72 kinds of foods includes 2.0% of arrowroot, 1.0% of bean sprouts, 35.0% of wild edible greens, 9% of pine needles, 10.0% of Rhynchosia Nulubilis, 1.0% of black bean and adzuki bean, 0.3% of mung beans, 1.0% of arrowroot sprout, 2.0% of pine mushroom, 0.3% of sesame leaf, 2.0% of leek, 1.0% of Indian millet, 1.5% of millet, 10.0% of brown rice, 0.3% each of bean, Artemisia capillaris Thunb., Indangssuk, mugwort, kale, carrot, cabbage, anchovy, dropwort, bean sprouts, dried walleye pollack, Angelica gigas Nakai, spinach, Chinese bellflowers, corn, perilla seed, foxtail millet, barley, black sesame, wild rocambole, Jobs-tear, glutinous rice, sesame, green laver, pine pollen, Hizikia fusiformis, pine buds, brown seaweed, tangleweed, bamboo sprout, sunflower seeds, mulberry leaves, jujube and dropwort, 2.0% of shiitake mushroom, 0.3% of walnut, 2.0% each of Coriolus versicolor and Ganoderma lucidum, 0.3% each of bean leaf, pumpkin seed, apricot, garlic, peanut, persimmon, radish, burdock, lotus root, taro, parsley, and chestnut, 1.0% of old pumpkin, and 0.3% each of radish tops, aster scaber thunb, shepherds purse, green onion, laver, potato, sweet potato and pine nut.

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α- chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:726046 CAPLUS
DOCUMENT NUMBER: 142:62449
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets
AUTHOR(S): Nunthanid, J.; Laungtana-anan, M.; Sriamornsak, P.;

Limmatvapirat, S.; Puttipipatkhachorn, S.; Lim, L. Y.; Khor, E.

CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom, 73000, Thailand

SOURCE: Journal of Controlled Release (2004), 99(1), 15-26
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A chitosan derivative as an acetate salt was successfully prepared by a spray drying technique. Physicochem. characteristics and micrometric properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 μm in diameter The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform IR (FTIR) and solid-state 13C NMR spectroscopy demonstrated the functional groups of an acetate salt in its mol. structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt, heated at 120°C for 12 h, revealed the evidence of the conversion of chitosan acetate mol. structure to N-acetylglucosamine at higher temperature No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% weight/weight SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, resp. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:174461 CAPLUS
DOCUMENT NUMBER: 141:179341

TITLE: Microencapsulation of hydrophilic drug substances using biodegradable polyesters. Part II: Implants allowing controlled drug release - a feasibility study using bisphosphonates

AUTHOR(S): Weidenauer, U.; Bodmer, D.; Kissel, T.
CORPORATE SOURCE: Dep. Pharmaceutics and Biopharm., Philipps-Univ., Marburg, D-35032, Germany

SOURCE: Journal of Microencapsulation (2004), 21(2), 137-149
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The prolonged delivery of hydrophilic drug salts from hydrophobic polymer carriers at high drug loading is an ambitious goal. Pamidronate disodium salt (APD) containing implants prepared from spray-dried microparticles were investigated using a laboratory ram extruder. An APD-containing polymer matrix consisting of an APD-chitosan implant embedded in the biodegradable polymer D,L-poly(lactide-co-glycolide acid-glucose) (PLG-GLU) was compared with a matrix system with the micronized drug distributed in the PLG-GLU. The

APD-chitosan matrix system showed a triphasic release behavior at loading levels of 6.86 and 15.54% (weight/weight) over 36 days under in-vitro conditions. At higher loading (31.92%), a drug burst was observed within 6 days due to the formation of pores and channels in the polymeric matrix. In contrast, implants containing the micronized drug showed a more continuous release profile over 48 days up to a loading of 31.78% (weight/weight). At a drug loading of 46.17% (weight/weight), a drug burst was observed Using micronized drug salts and reducing the surface area available for diffusion, parenteral delivery systems for highly water-soluble drug candidates were shown to be tech. feasible at high drug loadings.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:635078 CAPLUS
DOCUMENT NUMBER: 115:235078
TITLE: Nonwood fiber-based paper with good printability
INVENTOR(S): Kanayama, Nozomi; Endo, Akitaro
PATENT ASSIGNEE(S): Daifuku Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03167388	A	19910719	JP 1989-308119	19891127

PRIORITY APPLN. INFO.: JP 1989-308119 19891127

AB The title paper is made from pulps containing bast and/or leaf fibers and water-insol. fibrous CM-cellulose and salts and is coated with chitosan at least on its printing surface. Thus, handsheets (basis weight 40 g/m2) of 90:10 manila hemp fibers and CM-cellulose (degree of substitution 0.33) were sprayed with a .apprx.2% solution of 1:1 chitosan-glycolic acid (dry pickup 0.5%), and dried at 120° on a mirror drum. The sheets had better strength and printability than without CM-cellulose or chitosan.

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313

PRIORITY APPLN. INFO.: JP 1987-59229 19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution

of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L4 ANSWER 8 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2004437121 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15342177
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets.
AUTHOR: Nunthanid J; Laungtana-Anan M; Sriamornsak P; Limmatvapirat S; Puttipipatkhachorn S; Lim L Y; Khor E
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom 73000, Thailand.. jurairat@email.pharm.su.ac.th
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (2004 Sep 14) Vol. 99, No. 1, pp. 15-26.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200503
ENTRY DATE: Entered STN: 3 Sep 2004
Last Updated on STN: 5 Mar 2005
Entered Medline: 4 Mar 2005

AB A chitosan derivative as an acetate salt was successfully prepared by using a spray drying technique. Physicochemical characteristics and micromeritic properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 microm in diameter. The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform infrared (FTIR) and solid-state (13)C NMR spectroscopy demonstrated the functional groups of an acetate salt in its molecular structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt , heated at 120 degrees C for 12 h, revealed the evidence of the conversion of chitosan acetate molecular structure to N-acetylglucosamine at higher temperature. No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% w/w SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, respectively. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

L4 ANSWER 9 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2004297256 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15198426
TITLE: Microencapsulation of hydrophilic drug substances using biodegradable polyesters. Part II: Implants allowing controlled drug release--a feasibility study using bisphosphonates.
AUTHOR: Weidenauer U; Bodmer D; Kissel T

CORPORATE SOURCE: Department of Pharmaceutics and Biopharmacy, Philipps-University, D-35032 Marburg, Germany.
SOURCE: Journal of microencapsulation, (2004 Mar) Vol. 21, No. 2, pp. 137-49.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200409
ENTRY DATE: Entered STN: 17 Jun 2004
Last Updated on STN: 15 Sep 2004
Entered Medline: 14 Sep 2004

AB The prolonged delivery of hydrophilic drug salts from hydrophobic polymer carriers at high drug loading is an ambitious goal. Pamidronate disodium salt (APD) containing implants prepared from spray-dried microparticles were investigated using a laboratory ram extruder. An APD-containing polymer matrix consisting of an APD-chitosan implant embedded in the biodegradable polymer D,L-poly(lactide-co-glycolide acid-glucose) (PLG-GLU) was compared with a matrix system with the micronized drug distributed in the PLG-GLU. The APD-chitosan matrix system showed a triphasic release behaviour at loading levels of 6.86 and 15.54% (w/w) over 36 days under in-vitro conditions. At higher loading (31.92%), a drug burst was observed within 6 days due to the formation of pores and channels in the polymeric matrix. In contrast, implants containing the micronized drug showed a more continuous release profile over 48 days up to a loading of 31.78% (w/w). At a drug loading of 46.17% (w/w), a drug burst was observed. Using micronized drug salts and reducing the surface area available for diffusion, parenteral delivery systems for highly water-soluble drug candidates were shown to be technically feasible at high drug loadings.

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.: KR 2003-31616 A 20030519
WO 2004-KR410 W 20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.: KR 2003-31616 A 20030519
WO 2004-KR410 W 20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L7 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:807957 CAPLUS
DOCUMENT NUMBER: 145:248015
TITLE: Production of functional salt by heating roasted sea salt powder and chitosan to coat effective ingredient of chitosan to surface of sea salt whereby reducing salinity of sea salt and producing functional salt having efficacy of chitosan
INVENTOR(S): Bae, Jo Jung
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004102921	A	20041208	KR 2003-34762	20030530
PRIORITY APPLN. INFO.:			KR 2003-34762	20030530

AB A method of making functional salt by heating roasted sea salt powder and chitosan to coat the effective ingredient of the chitosan to the surface of sea salt is provided. The product is reduced in the salinity of sea salt and has the efficacy of chitosan as well as immunostimulating action, anticancer action, antibacterial action, blood pressure lowering action or the like. Sea salt is roasted at 400 to 1,200 °C in a charcoal kiln and ground to 10 to 30meshes, 100% by weight of the ground sea salt is mixed with 3 to 10% by weight of chitosan and roasted at 200 °C in a stainless steel vessel and then packed. The chitosan is selected from water-soluble chitosan or chitosan oligosaccharide.

L7 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:648539 CAPLUS
DOCUMENT NUMBER: 145:82354
TITLE: Manufacturing method of health seasoning salt including green tea and chitooligosaccharide and health seasoning salt manufactured thereby
INVENTOR(S): Jung, Man Jong
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004001369	A	20040107	KR 2002-36535	20020627
PRIORITY APPLN. INFO.:			KR 2002-36535	20020627

AB Provided are a manufacturing method of health seasoning salt including green tea and chitooligosaccharide and health seasoning salt manufactured thereby. The green tea has anticancer activity and antibacterial activity, lowers blood cholesterol level, and inhibits the increase of blood pressure and decrease of blood glucose level. The chitosan increase immunity, has antibacterial and anticancer activity, decreases blood glucose level, regulates blood cholesterol level, and prevents cardiovascular diseases. The manufacturing method of health

seasoning salt including green tea and chitooligosaccharide comprises the steps of: dissolving 0.1-10% of green tea powder and 0.1-10% of chitooligosaccharide in 100 parts by weight of water; adding salt thereto, followed by stirring for 40-60 min; and naturally drying the mixture in the shade for 12-24 h.

L7 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1138831 CAPLUS
DOCUMENT NUMBER: 144:5825
TITLE: Fermented soybean paste containing chitooligosaccharide
INVENTOR(S): Lee, Won Hui
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2002046272	A	20020620	KR 2002-31047	20020603
PRIORITY APPLN. INFO.:			KR 2002-24561 A	20020503

AB A fermented soybean paste is prepared by using chitooligosaccharide instead of directly using chitin or chitosan during the production of fermented soybean paste or soy sauce. The product has an improved taste and preservability and various physiol. actions such as anticancer activity, an antibacterial action, cholesterol-lowering activity, blood pressure-lowering activity, etc. A mixture of 16-17% by weight fermented soybean, 1-5% by weight chitooligosaccharide, and 17-19% by weight salt, plus water (to 100% by weight) is fermented at ambient temperature for 45-60 days to produce a fermented soybean paste. The filtrate is heated to produce soy sauce.

L7 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519

EP 1631155	A1	20060308	EP 2004-715573		20040227
R: DE, ES, FR, GB, IT					
JP 2006518190	T	20060810	JP 2005-518455		20040227
US 2005232999	A1	20051020	US 2004-518419		20041217
PRIORITY APPLN. INFO.:			KR 2003-31616	A	20030519
			WO 2004-KR410	W	20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:885242 CAPLUS
DOCUMENT NUMBER: 142:133516
TITLE: Functional noodles
INVENTOR(S): Kim, Sook Hee; Woo, Ki Min
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001007980	A	20010205	KR 2000-64506	20001101
PRIORITY APPLN. INFO.:			KR 2000-64506	20001101

AB Functional noodles are provided to extend an expiration date and to prevent high blood pressure and high cholesterol hematoma by adding chitin, chitosan, derivs. from chitin and chitosan, or oligosaccharides to ingredients for manufacturing wet noodle, modified cooked noodle, dry noodle, instant fried noodle and extruded noodle. Functional noodles contain chitin, chitosan, derivs. from chitin and chitosan or oligosaccharides in a range of 0.0001 weight% to 10 weight% comparing to total weight of noodles. Chitosan noodles has 30-62 weight% of flour, 6-13 weight% of starch, 0.1-2 weight% of salt, 0.01-0.2 weight% of alkalis, 0.02-0.12 weight% of gums, 0.001-0.01 weight% of coloring matters, 0.5-1.8 weight% of emulsifier, 0.01-0.05 weight% of polyphosphate salt and 20-25 weight% of water. The functional noodles are hand-beating noodle, wet noodle, buckwheat noodles, cooked noodle, modified cooked noodle, dried noodle, extruded noodles like pasta, iced vermicelli and Chinese noodles.

L7 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent

LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan .

L7 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:833007 CAPLUS
DOCUMENT NUMBER: 135:370991
TITLE: Compositions containing peptide and electrolyte excretion promoter and foods containing the same
INVENTOR(S): Takahashi, Ryuji; Yomoda, Satoshi
PATENT ASSIGNEE(S): Kanebo, Limited, Japan
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001084948	A1	20011115	WO 2001-JP3827	20010508
W: AU, CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1281323	A1	20030205	EP 2001-926140	20010508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
AU 782727	B2	20050825	AU 2001-52689	20010508
US 2003144179	A1	20030731	US 2002-258420	20021022

PRIORITY APPLN. INFO.: JP 2000-138373 A 20000511
WO 2001-JP3827 W 20010508

AB Compns. containing peptide(s) and electrolyte excretion promoter(s) characterized by comprising a peptide or a peptide mixture, which is obtained by digesting casein with a protease such as trypsin and has angiotensin converting enzyme-inhibiting activity, and ≥1 electrolyte excretion promoters selected from chitosan, alginic acid, and salts thereof. Owing to the synergistic effects of the components, these compns. exert an excellent effect of inhibiting increase in blood pressure, and does not have bitterness taste and pungency associated with the peptides.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:480808 CAPLUS
DOCUMENT NUMBER: 135:106702
TITLE: Effects of chloride on stroke incidence and blood pressure in salt-sensitive hypertensive rats
AUTHOR(S): Katoh, Seiji
CORPORATE SOURCE: Second Dep. Med. Biochem., Sch. Med., Ehime Univ., Shigenobu-cho, Onsen-gun, Ehime, 791-0295, Japan
SOURCE: Nippon Eiyo, Shokuryo Gakkaishi (2001), 54(3), 147-153
CODEN: NESGDC; ISSN: 0287-3516
PUBLISHER: Nippon Eiyo, Shokuryo Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The effects of chloride on stroke incidence and blood pressure were examined in salt-sensitive hypertensive rats. Stroke-prone spontaneously hypertensive rats (SHRSP) and Dahl salt-sensitive (DahlS) rats were fed on a 3% NaCl diet with or without 5% chitosan or 5% alginate, which have potent inhibitory effects on intestinal absorption of chloride and sodium, resp. In SHRSP, the chitosan diet prevented stroke efficiently, whereas the alginate diet had no significant preventive effect. In DahlS rats, although the chitosan diet attenuated salt-accelerated hypertension, the alginate diet had no effect on blood pressure. In DahlS rats, 1 h of feeding on the high-salt diet increased the serum chloride concentration and stimulated the activity of angiotensin converting enzyme (ACE), whereas no changes were seen in the group given the high-salt diet with chitosan. These results suggest that chloride induces stroke and hypertension in salt-sensitive hypertensive rats, concomitant with stimulation of serum ACE activity.

L7 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:731496 CAPLUS
DOCUMENT NUMBER: 133:313629
TITLE: Chitosan soft capsules and their manufacture
INVENTOR(S): Sato, Toshio; Mizushima, Hiroshi; Kosaka, Yasuo
PATENT ASSIGNEE(S): LTT Inst. Co., Ltd., Japan; V-Tech Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000290187	A	20001017	JP 1999-98146	19990405
US 6190694	B1	20010220	US 1999-416183	19991011
CA 2291286	A1	20001005	CA 2000-2291286	19991129

PRIORITY APPLN. INFO.: JP 1999-98146 A 19990405
AB The invention relates to a process for making soft capsules containing chitosan as a main ingredient, wherein the process includes powdering chitosan, mixing the chitosan powder with organic acid, organic acid salt, oil, and emulsifier to obtain a gel suspension, and encapsulating the gel suspension. Soft capsules were formulated from squid chitosan 207, glutamic acid 103.5, sodium glutamate 207, soybean oil, monoglyceride 155.25, beeswax 155.25 g, and tested for their solubility in artificial intestinal juice and blood pressure-lowering effect in hypertensive patients.

L7 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:514800 CAPLUS

DOCUMENT NUMBER: 122:255896
TITLE: Antihypertensive effect of chitosan in rats and humans
AUTHOR(S): Kato, Hideo; Taguchi, Tomoko; Okuda, Hiromichi; Kondo, Mari; Takara, Minoru
CORPORATE SOURCE: Department of Food and Nutrition, Hiroshima Women's College, Onsen, 791-02, Japan
SOURCE: Wakan Iyakugaku Zasshi (1994), 11(3), 198-205
CODEN: WIZAEL; ISSN: 1340-6302
PUBLISHER: Wakan Iyaku Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of dietary fibers on the hypertensive action of NaCl was examined by administration of a high salt diet containing alginic acid, which readily absorbs cations, or chitosan, which readily absorbs anions, to normotensive rats and SHRSP for 40 days. Addition of alginic acid to the high salt diet increased the amount of sodium and the addition of chitosan increased the amount of chloride in the feces of normotensive rats. Addition of chitosan to the high salt diet resulted in a significantly lower systolic blood pressure than addition of alginic acid in both groups. Serum ACE was significantly reduced in SHRSP fed with the high salt diet containing chitosan. Serum chloride ion was lower in the normotensive rats fed with the high salt diet containing chitosan than alginic acid. In humans, the high salt diet increased the systolic blood pressure and serum ACE activity and chloride concentration after 1 h. and oral administration of chitosan inhibited these increases. It also reduced the serum bicarbonate level after 1 h, but did not affect the sodium concentration Serum ACE in humans was found to be stimulated by chlorideion. These results suggest that chitosan prevents increase in the systolic blood pressure of humans induced by high salt intake by inhibiting intestinal absorption of chloride, an activator of ACE. Based on these results, the relationship between serum ACE and chloride concentration was discussed.

L7 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:400906 CAPLUS
DOCUMENT NUMBER: 121:906
TITLE: chitosan as antihypertensive
INVENTOR(S): Kato, Hideo; Okuda, Hiromichi
PATENT ASSIGNEE(S): Suisancho Chokan, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06056674	A	19940301	JP 1992-258422	19920928
JP 2507907	B2	19960619		

PRIORITY APPLN. INFO.: JP 1992-147759 A1 19920608

AB Chitosan alone or added to feed or food promoted the chlorine excretion in feces and lowered the blood pressure in spontaneous hypertensive rats and male subjects given a high-salt diet.

L11 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:627293 CAPLUS
DOCUMENT NUMBER: 135:168161
TITLE: Chitosan succinate sodium salt production method
INVENTOR(S): Komarov, B. A.; Albulov, A. I.; Belov, M. Yu.; Samuylenko, A. Ya.; Fomenko, A. S.; Shinkarev, S. M.; Trunov, A. M.
PATENT ASSIGNEE(S): Vserossiiskii Nauchno-Issledovatel'skii i Tekhnologicheskii Institut Biologicheskoi Promyshlennosti, Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2144040	C1	20000110	RU 1998-106316	19980407

PRIORITY APPLN. INFO.: RU 1998-106316 19980407

AB Succinyl chitosan sodium salt is prepared by (1) preparing homogeneous chitosan solution, (2) separating chitosan by adding NaOH, (3) reacting the obtained chitosan suspension with succinic anhydride, (4) neutralizing the reaction mixture, and (5) separating the reaction product by drying. The method is characterized by the alkali treatment of chitosan until average pH reaches 6.9-7.5, chitosan is subsequently amorphized by exposing its aqueous suspension to cavitation or shearing, succinic anhydride is used in the form of powder with particle size no larger than 100 mcm, neutralization is carried out with alkali solution, and final product is isolated by spray or sublimation drying. This method is simple and does not involve environmentally unfriendly organic solvents.

L11 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:458758 CAPLUS
DOCUMENT NUMBER: 135:60476
TITLE: Food additives containing ascorbic acid chitosan complexes, their manufacture, and food containing them
INVENTOR(S): Hashimoto, Kunihiko; Onishi, Nobukazu
PATENT ASSIGNEE(S): Nishikawa Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001169750	A	20010626	JP 1999-376807	19991217
JP 3476130	B2	20031210		

PRIORITY APPLN. INFO.: JP 1999-376807 19991217

AB Food additives, which control lipid metabolism and stimulate immunity, are manufactured by (1) dissolving chitin-chitosan or chitosan with deacetylation degree ≥75% in 0.1-5% organic acid buffer at 0.05-3%, (2) adjusting the solution at pH 5.0-7.5 upon addition of aqueous alkaline solns., (3) adding ≥1 compound selected from ascorbic acid, ascorbic acid, 2-O-phosphate, ascorbic acid 2-O-glucoside, and their salts , preferably their dried products, to the solution at 3-6 mol per 1 kg (dry weight) chitosans, and then (4) pulverizing the solution

by freeze-drying and/or spray-drying at a lower temperature Foods manufactured by adding the additives to powder or dissolving them to liqs. are also claimed. Chitosan with deacetylation degree 85% was dissolved in an aqueous solution of glutamic acid and the solution was treated with NaOH solution to adjust pH at 6.0. One of the above ascorbic acids was added to the solution and the mixture was freeze-dried to give powder. Hypocholesteremic effect of the powder was shown in hyperlipemic patients. The powder also increased IgG1 and IgG2 in Japanese black calves and Holstein calves.

L11 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:19335 CAPLUS
DOCUMENT NUMBER: 132:65671
TITLE: Manufacture of quaternary ammonium salts of chitosan
INVENTOR(S): Tanaka, Yoshiaki; Okuno, Hiroshi; Tsutsui, Kiyoko
PATENT ASSIGNEE(S): Lignite Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000001504	A	20000107	JP 1998-169826	19980617
PRIORITY APPLN. INFO.:			JP 1998-169826	19980617

AB The salts are manufactured by quaternizing a chitosan compound in a solvent using alkyl iodide to partially convert the amino group of chitosan to trialkylated iodide salts, deionizing the reaction with ion-exchange resin, exchanging the I ions with Br or Cl ions and spray drying.

L11 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:132794 CAPLUS
DOCUMENT NUMBER: 128:235074
TITLE: Design of microencapsulated chitosan microspheres for colonic drug delivery
AUTHOR(S): Lorenzo-Lamosa, M. L.; Remunan-Lopez, C.; Vila-Jato, J. L.; Alonso, M. J.
CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutical Technology, University of Santiago de Compostela, Santiago de Compostela, 15706, Spain
SOURCE: Journal of Controlled Release (1998), 52(1,2), 109-118
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Among the different approaches to achieve colon-selective drug delivery, the use of polymers, specifically biodegraded by colonic bacteria, holds great promise. In this work a new system which combines specific biodegradability and pH-dependent release is presented. The system consists of chitosan (CS) microcores entrapped within acrylic microspheres. Sodium diclofenac (SD), used as a model drug, was efficiently entrapped within CS microcores using spray-drying and then microencapsulated into Eudragit L-100 and Eudragit S-100 using an oil-in-oil solvent evaporation method. The size of the CS microcores was small (1.8-2.9 μm) and they were efficiently encapsulated within Eudragit microspheres (size between 152 and 223 μm) forming a multireservoir system. Even though CS dissolves very fast in acidic media, at pH 7.4, SD release from CS microcores was delayed, the release rate being adjustable (50 dissolved within 30-120 min) by changing

the CS mol. weight (MW) or the type of CS salt. Furthermore, by coating the CS microcores with Eudragit, perfect pH-dependent release profiles were attained. No release was observed at acidic pHs, however, when reaching the Eudragit pH solubility, a continuous release for a variable time (8-12 h) was achieved. A combined mechanism of release is proposed, which considers the dissoln. of the Eudragit coating, the swelling of the CS microcores and the dissoln. of SD and its further diffusion through the CS gel cores. In addition, IR (IR) spectra revealed that there was an ionic interaction between the amine groups of CS and the carboxyl groups of Eudragit, which provided the system with a new element for controlling the release. In conclusion, this work presents new approaches for the modification of CS as well as a new system with a great potential for colonic drug delivery.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:20052 CAPLUS
DOCUMENT NUMBER: 116:20052
TITLE: Whipping cream substitute powders containing chitosan and their manufacture
INVENTOR(S): Ootani, Makoto; Tatsumi, Kyoshi
PATENT ASSIGNEE(S): Snow Brand Milk Products Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03210147	A	19910913	JP 1990-5986	19900112

PRIORITY APPLN. INFO.: JP 1990-5986 19900112

AB Whipping cream substitute powders are manufactured by emulsifying oil and aq phases, mixing with chitosan solns., homogenizing, sterilizing, concentrating, and drying. The powders are whipped with H2O and the whipped cream substitutes show good shape retention, mild taste and melt smoothly in the mouth. An oil phase of hydrogenated coconut oil, hydrogenated palm kernel oil, and emulsifiers were mixed with aqueous phase containing acid casein, Ca(OH)2, phosphate salts, sucrose, powdered starch sugar, whey, and guar gum and homogenized with an aqueous solution containing chitosan and lactic acid, sterilized, and spray-dried to manufacture a powder.

L11 ANSWER 14 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2006142181 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16314079
TITLE: Preparation and release of salbutamol from chitosan and chitosan co-spray dried compacts and multiparticulates.
AUTHOR: Corrigan Deirdre O; Healy Anne Marie; Corrigan Owen I
CORPORATE SOURCE: School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin, Ireland.
SOURCE: European journal of pharmaceutics and biopharmaceutics : official journal of Arbeitsgemeinschaft fur Pharmazeutische Verfahrenstechnik e.V, (2006 Apr) Vol. 62, No. 3, pp. 295-305. Electronic Publication: 2005-11-28.
Journal code: 9109778. ISSN: 0939-6411.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200605

ENTRY DATE: Entered STN: 14 Mar 2006
Last Updated on STN: 31 May 2006
Entered Medline: 30 May 2006

AB Chitosan microparticulates were prepared by spray drying from aqueous media containing hydrochloric acid or acetic acid. The medium affected the morphology and degree of acetylation of chitosan, the presence of acetic acid resulting in increased acetylation of the polymer during processing. Co-spray drying salbutamol sulphate/chitosan systems with the crosslinking agent formaldehyde had no detectable effect on particle morphology. However, with increasing salbutamol loading particles became less spherical, taking on a collapsed appearance. Spray dried chitosan-salbutamol sulphate microparticulates were X-ray amorphous. Chitosan-salbutamol sulphate composites were compressed into discs to quantify drug release and showed delayed release of salbutamol sulphate. The general power law equation fitted the data better than the t0.5, mono- or bi-exponential models and gave n indices greater than 0.5, i.e. in the range 0.53-0.71. Crosslinking did not dramatically alter the drug release behaviour. Both crosslinked and non-crosslinked composites swelled during release, the former to the greater extent. The release data for crosslinked composites gave slightly higher n values than the corresponding non-crosslinked composites, consistent with the increased swelling of these systems. Release studies were also conducted on the microparticulates. Because of the small particle size and large surface area present, the release of the highly soluble drug salt was extremely rapid (> 90% release in 5 min). Twin impinger analysis indicated good in vitro deposition of the microparticulates and potential for pulmonary delivery.

L11 ANSWER 15 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L11 ANSWER 16 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2003477091 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14553988

TITLE: Alkaline chitosan solutions.
AUTHOR: Muzzarelli Corrado; Tosi Giorgio; Francescangeli Oriano; Muzzarelli Riccardo A A
CORPORATE SOURCE: Institute of Biochemistry, Faculty of Medicine, Polytechnic University of Marche, Via Ranieri 67, IT-60100 Ancona, Italy.
SOURCE: Carbohydrate research, (2003 Oct 10) Vol. 338, No. 21, pp. 2247-55.
Journal code: 0043535. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200407
ENTRY DATE: Entered STN: 15 Oct 2003
Last Updated on STN: 29 Jul 2004
Entered Medline: 28 Jul 2004

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solutions into saturated ammonium hydrogen carbonate. Incubation at 20 degrees C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO(2)(-)NH(4)(+) a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, molecular sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solutions at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 degrees C). Citrate could cross-link chitosan and impart insolubility to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH(4)HCO(3) treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solutions of mixed chitosan carbamate and alginate were spray-dried at 115 degrees C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 micron.

L11 ANSWER 17 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2003320948 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12851047
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Petrachi M; Orienti I; Zecchi V
CORPORATE SOURCE: University of Bologna, Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: Journal of microencapsulation, (2003 Jul-Aug) Vol. 20, No. 4, pp. 473-8.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200311
ENTRY DATE: Entered STN: 10 Jul 2003
Last Updated on STN: 18 Dec 2003
Entered Medline: 26 Nov 2003

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride

delivery. Chitosan aspartate (CH-Asp), chitosan glutamate (CH-Glu) and chitosan hydrochloride (CH-HCl) were prepared by freeze-drying and coated with stearic, palmitic, myristic and lauric acids by spray-drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.

L11 ANSWER 18 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2002257824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11996810
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery.
AUTHOR: Orienti I; Cerchiara T; Luppi B; Bigucci F; Zuccari G; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Via S. Donato 19/2, 40127, Bologna, Italy.. orienti@biocfarm.unibo.it
SOURCE: International journal of pharmaceutics, (2002 May 15) Vol. 238, No. 1-2, pp. 51-9.
Journal code: 7804127. ISSN: 0378-5173.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 9 May 2002
Last Updated on STN: 28 Jun 2002
Entered Medline: 27 Jun 2002

AB Chitosan (CH) was dissolved in aqueous solutions containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solutions by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behaviour of SD from the physical mixture during gastrointestinal transit. The physical mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with beta-glucosidase at pH 7.0 enhanced the release rate. Among the CH salts used, glutamic and aspartic salts provided the best control of release.

L11 ANSWER 19 OF 19 MEDLINE on STN
ACCESSION NUMBER: 1998350558 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9685941
TITLE: Design of microencapsulated chitosan microspheres for colonic drug delivery.
AUTHOR: Lorenzo-Lamosa M L; Remunan-Lopez C; Vila-Jato J L; Alonso M J
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Santiago de Compostela, Spain.
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (1998 Mar 2) Vol. 52, No. 1-2, pp. 109-18.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199808

ENTRY DATE: Entered STN: 20 Aug 1998
Last Updated on STN: 20 Aug 1998
Entered Medline: 13 Aug 1998

AB Among the different approaches to achieve colon-selective drug delivery, the use of polymers, specifically biodegraded by colonic bacteria, holds great promise. In this work a new system which combines specific biodegradability and pH-dependent release is presented. The system consists of chitosan (CS) microcores entrapped within acrylic microspheres. Sodium diclofenac (SD), used as a model drug, was efficiently entrapped within CS microcores using spray-drying and then microencapsulated into Eudragit L-100 and Eudragit S-100 using an oil-in-oil solvent evaporation method. The size of the CS microcores was small (1.8-2.9 microns) and they were encapsulated within Eudragit microspheres (size between 152 and 233 microns) forming a multireservoir system. Even though CS dissolves very fast in acidic media, at pH 7.4, SD release from CS microcores was delayed, the release rate being adjustable (50% dissolved within 30-120 min) by changing the CS molecular weight (MW) or the type of CS salt. Furthermore, by coating the CS microcores with Eudragit, perfect pH-dependent release profiles were attained. No release was observed at acidic pHs, however, when reaching the Eudragit pH solubility, a continuous release for a variable time (8-12 h) was achieved. A combined mechanism of release is proposed, which considers the dissolution of the Eudragit coating, the swelling of the CS microcores and the dissolution of SD and its further diffusion through the CS gel cores. In addition, infrared (IR) spectra revealed that there was an ionic interaction between the amine groups of CS and the carboxyl groups of Eudragit, which provided the system with a new element for controlling the release. In conclusion, this work presents new approaches for the modification of CS as well as a new system with a great potential for colonic drug delivery.

L11 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:224292 CAPLUS
DOCUMENT NUMBER: 145:195416
TITLE: Preparation and release of salbutamol from chitosan and chitosan co-spray dried compacts and multiparticulates
AUTHOR(S): Corrigan, Deirdre O.; Healy, Anne Marie; Corrigan, Owen I.
CORPORATE SOURCE: School of Pharmacy and Pharmaceutical Sciences, Trinity College, University of Dublin, Dublin, Ire.
SOURCE: European Journal of Pharmaceutics and Biopharmaceutics (2006), 62(3), 295-305
CODEN: EJPBEL; ISSN: 0939-6411
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan microparticulates were prepared by spray drying from aqueous media containing hydrochloric acid or acetic acid. The medium affected the morphol. and degree of acetylation of chitosan, the presence of acetic acid resulting in increased acetylation of the polymer during processing. Co-spray drying salbutamol sulfate/chitosan systems with the crosslinking agent formaldehyde had no detectable effect on particle morphol. However, with increasing salbutamol loading particles became less spherical, taking on a collapsed appearance. Spray dried chitosan-salbutamol sulfate microparticulates were X-ray amorphous. Chitosan-salbutamol sulfate composites were compressed into disks to quantify drug release and showed delayed release of salbutamol sulfate. The general power law equation fitted the data better than the t 0.5, mono- or bi-exponential models and gave n indexes greater than 0.5, i.e. in the range 0.53-0.71. Crosslinking did not dramatically alter the drug release behavior. Both crosslinked and non-crosslinked composites swelled during release, the former to the greater extent. The release data for crosslinked composites gave slightly higher n values than the corresponding non-crosslinked composites, consistent with the increased swelling of these systems. Release studies were also conducted on the microparticulates. Because of the small particle size and large surface area present, the release of the highly soluble drug salt was extremely rapid (>90% release in 5 min). Twin impinger anal. indicated good in vitro deposition of the microparticulates and potential for pulmonary delivery.
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1138507 CAPLUS
TITLE: Manufacturing method of dried corvina using medical plant
INVENTOR(S): Kim, Sung Ho
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003044157	A	20030609	KR 2001-74805	20011129
PRIORITY APPLN. INFO.:			KR 2001-74805	20011129

AB PURPOSE: Provided is a manufacturing method of a dried corvina by using a medical plant and sun-dried salt removed from poisonous

substances, thereby increasing human health. CONSTITUTION: A manufacturing method of a dried corvina using a medical plant comprises the steps of: removing poisonous substances from sun-dried salt using reeds, and charcoal or silver; adding Laminaria salt and bamboo salt to the sun-dried salt; dipping medicinal plants in charcoal solution, pyroligneous solution, or reed root solution for 2 hours to remove poisonous substances, followed by washing and dewatering them; pulverizing or extracting the medicinal plants and adding the salt prepared above, Cordyceps militaris powder or chitosan powder thereto; spraying the mixture thereof to a corvina and leaving it for several days; washing the corvina with charcoal solution then drying it.

L11 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L11 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:566810 CAPLUS
DOCUMENT NUMBER: 140:64869
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Petrachi, M.; Orienti, I.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: Journal of Microencapsulation (2003), 20(4), 473-478
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by freeze drying and coated with stearic, palmitic, myristic and lauric acids by spray -drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts

on the release behavior of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:343408 CAPLUS
DOCUMENT NUMBER: 136:324481
TITLE: Manufacture of herb salt from herbs cultured using chitosan spray
INVENTOR(S): Omoto, Fujiko
PATENT ASSIGNEE(S): Apio Club K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002125616	A	20020508	JP 2000-328479	20001027
PRIORITY APPLN. INFO.:			JP 2000-328479	20001027

AB Herb salt is manufactured by cultivating herbs while spraying aqueous chitosan solution to leaves, cropping fruits, leaves, and stems, shade- or sun-drying them, cutting them, and mixing them with NaCl. Spraying rosemary with chitosan solution reduced nitrate concentration and increased Brix.

L11 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:999284 CAPLUS
DOCUMENT NUMBER: 142:279143
TITLE: Process for producing salted fish with seaweeds powder, mugwort extract, green tea extract and chitosan solution
INVENTOR(S): Kim, Deuk Gi
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003094199	A	20031211	KR 2003-83704	20031124

PRIORITY APPLN. INFO.: KR 2003-83704 20031124

AB A process for producing a salted fish with seaweeds powder, a mugwort extract, a green tea extract and a chitosan solution is provided, thereby preventing adult diseases, removing fishy smell, and preserving freshness of the fish for a long time. The process comprises the steps of: washing and removing internal organs of fish; spraying salts on the fish; spraying seaweeds powder on the surface of the fish; maturing the salted and seaweeds powder sprayed fish; and packaging the matured fish under vacuum condition, wherein the seaweeds include tangleweed, brown seaweed and brown algae; the matured fish may be further dipped in mugwort or green tea extract; the matured fish may be further coated with a chitosan solution

L20 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α- chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a

chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L20 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:658743 CAPLUS
DOCUMENT NUMBER: 137:190771
TITLE: Chitosan-containing solution for prophylactic treatment of teats of lactating animals
INVENTOR(S): Hellman, Asa; Mathisen, Torbjorn
PATENT ASSIGNEE(S): Swed.
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119949	A1	20020829	US 2001-791739	20010226
CA 2439465	A1	20020906	CA 2002-2439465	20020225
WO 2002067952	A1	20020906	WO 2002-SE318	20020225
WO 2002067952	A8	20040521		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1372672	A1	20040102	EP 2002-700937	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007531	A	20040309	BR 2002-7531	20020225
JP 2005508835	T	20050407	JP 2002-567318	20020225
PRIORITY APPLN. INFO.:			US 2001-791739 A	20010226
			WO 2002-SE318 W	20020225

AB An aqueous solution for prophylactic treatment of teats of lactating cows comprises as a first component at least partially deacetylated chitosan or its acid addition salt in a concentration of up to about 2% by weight of chitosan. A pH solution of the solution is adjusted to about 4-6.8 by the addition of a mineral or organic acid. The first component has a mol. weight such that the viscosity of the solution is < 50 mPas. The aqueous solution further comprises a second component selected from heparin, heparan sulfate, and dextran sulfate, the weight ratio between the first and second components being from about 10:1 to about 100:1. For example, 5.8 g 87% glycerol was added to 95 mL of water and 0.3 mL acetic acid (99.9%) was added to the glycerol solution under stirring until a homogeneous solution was obtained. To the solution prepared was then added 1.0 g chitosan (MW of about 80 kD, deacetylation degree 94% (Primex)) and stirring was maintained until all chitosan has been dissolved. The pH of this solution was about 5.2. The solution showed improved stability and resulted in a viscosity lying within the preferred range and enabling easy handling in connection with the application to the teats.

L20 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:716545 CAPLUS
DOCUMENT NUMBER: 135:222846
TITLE: Salt- and drought-resistant agent for plant and its application
INVENTOR(S): Zhao, Kefu; Cao, Ziyi; Song, Jie; Zhang, Hui; Zhao, Yanxiu
PATENT ASSIGNEE(S): Shandong Normal University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1290483	A	20010411	CN 1999-112463	19990930
PRIORITY APPLN. INFO.:			CN 1999-112463	19990930

AB The title agent contains gibberellin compds. from one or more of GA3, GA7, GA4 and their K or Na salts, salicylic acid derivs. from one or more of Na salicylate, K salicylate, Ca salicylate, Me salicylate, Et salicylate and Pr salicylate, amino oligosaccharide (O-carboxymethyl chitosan), and calcium salt from one or more of CaCl2, Ca(NO3)2, Ca(Ac)2, Ca propionate, Ca butyrate, Ca valerate, Ca citrate, etc. Vitamins, amino acids, plant growth regulators, organic acid, mineral substance, surfactant, polysaccharides can be added to the agent. The agent is suitable for the crops growing in salty soil, and used to immerse seeds, spray seedlings or mix with seeds. The agent is drought-resistant and salt-resistant.

L20 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:7489 CAPLUS
DOCUMENT NUMBER: 134:71036
TITLE: Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6167652	B1	20010102	US 1999-237065	19990126
PRIORITY APPLN. INFO.:			US 1997-787870 B2	19970123
			US 1998-13945 B2	19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025734	A1	20000511	WO 1999-EP8105	19991027
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19850734	A1	20000511	DE 1998-19850734	19981104
EP 1131040	A1	20010912	EP 1999-971303	19991027
EP 1131040	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ES 2235551	T3	20050701	ES 1999-971303	19991027
PRIORITY APPLN. INFO.:			DE 1998-19850734 A	19981104
			WO 1999-EP8105 W	19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:519876 CAPLUS
DOCUMENT NUMBER: 129:132548
TITLE: Chitosan salts as crop yield enhancers.
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832335	A1	19980730	WO 1998-US1331	19980122
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2278301	A1	19980730	CA 1998-2278301	19980122
AU 9862484	A	19980818	AU 1998-62484	19980122
EP 964616	A1	19991222	EP 1998-904665	19980122
EP 964616	B1	20030102		
R: DE, ES, FR, GB, IT, NL, PT, IE				

BR 9806926	A	20000502	BR 1998-6926		19980122
JP 2001507361	T	20010605	JP 1998-532152		19980122
ES 2189133	T3	20030701	ES 1998-904665		19980122
MX 9906833	A	20000531	MX 1999-6833		19990722
PRIORITY APPLN. INFO.:			US 1997-787870	A	19970123
			WO 1998-US1331	W	19980122

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties have an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5 weight% chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 8907395	A1	19890824	WO 1989-US429		19890207
W: AU, BR, DK, FI, JP, NO, SU					
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE					
AU 8931926	A	19890906	AU 1989-31926		19890207
ZA 8901214	A	19891129	ZA 1989-1214		19890216
PRIORITY APPLN. INFO.:			US 1988-158227	A	19880219
			US 1988-251693	A	19880927
			WO 1989-US429	A	19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L20 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313

PRIORITY APPLN. INFO.: JP 1987-59229 19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L20 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:572265 CAPLUS

DOCUMENT NUMBER: 87:172265

TITLE: Studies on the utilization of crab shell waste - chitosan as a coagulating agent

AUTHOR(S): Fujita, Takao; Yamauchi, Takafumi; Yanagisawa, Ikuko; Hiroi, Osamu

CORPORATE SOURCE: Cent. Res. Lab., Nippon Suisan Co., Ltd., Tokyo, Japan

SOURCE: Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku (1976), 11, 49-55
CODEN: NSKHA2; ISSN: 0369-5735

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB HCHO was sprayed on powdered chitin prepared from king crab shell to obtain chitosan salt containing H2O 10 and HCHO 18%, which was used for coagulation of clay suspension, wastewater from processing of ground fish meat, and activated sludge. In the coagulation test of clay suspension with 0.1-20 ppm chitosan, the coagulation and settling of clay particles were accelerated with increasing chitosan salt. The chitosan salt also had good coagulation effect for wastewater from ground fish meat processing and activated sludge.

L26 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α-chitosan is obtained from shells of crab and shrimp and β-chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L31 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:846323 CAPLUS
DOCUMENT NUMBER: 142:24852
TITLE: Chitosan containing composition for reducing toxicity of anticancer agent
INVENTOR(S): Chon, Dong Won; Sung, Yong Kil
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korea, No pp. given
CODEN: KRXXFC
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 173726	B1	19990201	KR 1995-30567	19950919

PRIORITY APPLN. INFO.: KR 1995-30567 19950919

AB A pharmaceutical composition containing aqueous chitosan as an active component for reducing toxicity of an anticancer drug and improving anticancer effect is provided which can be effectively used as a safener to an anticancer drug. A composition containing aqueous chitosan having a mol. weight 900-25,000 is used as a safener to an anticancer drug in which 0.02-1 g anticancer drug is applied to 1 g aqueous chitosan. The anticancer drug is at least one selected from actinomycin D, acralvicine, cyclocytidine, busulfan, chromomycin A3, cisplatin, cytosine arabinoside, daunomycin, 5-FU, L-asparaginase, 6-mercaptopurine, riboside, OK-432, PSK, UFT, vincristine, and vindesine.

L31 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:512437 CAPLUS
DOCUMENT NUMBER: 141:55857
TITLE: Manufacture of chitosan-containing composite emulsions with improved volume efficiency and storage stability, their compositions, and articles coated with them
INVENTOR(S): Urakami, Tadashi; Waki, Atsushi; Inui, Kuniaki; Matoba, Yasuhiro; Taichi, Ikuo; Imashiro, Hideki; Irie, Yasuhiro
PATENT ASSIGNEE(S): Kowa Chemical Industries Co., Ltd., Japan; Chuo Rika Kogyo Corporation
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004175876	A	20040624	JP 2002-342283	20021126
JP 3789887	B2	20060628		

PRIORITY APPLN. INFO.: JP 2002-342283 20021126

AB The method contains polymerizing radically polymerizable monomers in the presence of chitosan (derivs.) by adding emulsions of them to reaction system successively or intermittently. Thus, dropping a prepolymd. emulsion containing Adeka Reasoap ER 20 (nonionic reactive emulsifier) 77.3, Adeka Reasoap ER 30 (nonionic reactive emulsifier) 5, Me methacrylate 90, cyclohexyl methacrylate 60, 2-ethylhexyl acrylate 92, C 60M (chitosan) 8, adipic acid 6 parts to a reactor at 60° for 2 h, aging it at 70° for 2 h, and applying it to a plaster board gave a coating

showing good dryability, alkali resistance, and deodorant properties.

L31 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:757430 CAPLUS
DOCUMENT NUMBER: 139:256713
TITLE: Chitosan-containing composition for improving disease resistance and growth of plants
INVENTOR(S): Sakurai, Haseo; Fukuya, Hiroki; Anzai, Fukumi
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077654	A1	20030925	WO 2003-JP3472	20030320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003217484	A1	20030929	AU 2003-217484	20030320
JP 2003342105	A	20031203	JP 2003-77850	20030320
JP 3781733	B2	20060531		
EP 1484968	A1	20041215	EP 2003-712813	20030320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1642419	A	20050720	CN 2003-806395	20030320
US 2005239657	A1	20051027	US 2005-508213	20050609

PRIORITY APPLN. INFO.:

JP 2002-77965	A	20020320
US 2002-367214P	P	20020326
WO 2003-JP3472	W	20030320

AB A composition for improving disease resistance and growth of plants comprises (A) a chitosan having a mol. weight of 3,000 to 60,000, (B) a chitosan having a mol. weight of 35,000 to 90,000 (provided that the mol. weight of chitosan (A) and the mol. weight of chitosan (B) are different) and (C) a lactic acid and/or a succinic acid. By using the composition of the present invention wherein two kinds of chitosans having different mol. wts., an effect of enhancing stable and high disease resistance and improving growth can be exerted on plants.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:764027 CAPLUS
DOCUMENT NUMBER: 130:48702
TITLE: Chitosan-containing compositions for improving plant disease resistance
INVENTOR(S): Vasiljevich, Novozhilov kapiton; Leonidovich, Tjuterev Stanislav; Aleksandrovich, Tarlakovskij Stanislav; Sergeevich, Jaubchik Mikhail; Filippovich, Kolomiets Aleksej; Fedorovich, Panarin Evgenij; Jakovlevich, Ismailov Eduard; Ismailovich, Gamza-Zade Arif;

Jakovlevich, Ismailov Vladimir; Ivanovich, Begunov Ivan
PATENT ASSIGNEE(S): Iskra Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10309129	A	19981124	JP 1997-282316	19971015
JP 3356973	B2	20021216		
RU 2127056	C1	19990310	RU 1997-101133	19970123
RU 2158510	C2	20001110	RU 1997-107927	19970515
PRIORITY APPLN. INFO.:			RU 1997-101133 A	19970123
			RU 1997-107927 A	19970527

AB Compns. for enhancing resistance to plant diseases comprise chitosan; lactic acid and/or succinic acid, optionally mixed with glutamic acid or its salts; and 1-3 kinds of biol. active materials selected from phytohormones, unsatd. fatty acids or derivs., alkyldimethylbenzylammonium salts of crotonic acid-vinylpyrrolidone copolymer, phenolic acids, and inorg. salts; and water. Thus, seed treatment with an aqueous solution containing chitosan 0.5 and succinic acid 0.5% by weight was effective for controlling Helminthosporium sativum in wheat.

L31 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:576618 CAPLUS
DOCUMENT NUMBER: 129:217686
TITLE: Biodegradable and transparent chitosan-containing compositions and their manufacture
INVENTOR(S): Sumida, Hiroshi; Yoshimoto, Katsuhiko; Yoshimura, Osamu; Ueda, Kazumasa
PATENT ASSIGNEE(S): Negami Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10231382	A	19980902	JP 1997-36725	19970220
JP 3799117	B2	20060719		
PRIORITY APPLN. INFO.:			JP 1997-36725	19970220

AB The compns., useful for foams and films in packaging and agriculture (no data), are manufactured by drying and curing an aqueous mixts. of chitosan, poly(vinyl alc.), and compds. containing ≥2 amino- and/or OH-reactive groups. Thus, a composition containing 20 parts 10% SK 10 AcOH aqueous solution (chitosan), 80 parts 10% Gohsenol GH 20 aqueous solution (PVA), 0.8 part M 3 (crosslinking agent), and 1 part glycerin was cast on a polyester film and dried at 90-130° for 1 h to give a 30 μm-thick transparent film showing tensile strength 6.9 kg/mm2, elongation 69%, good water resistance., biodegradability, and antibacterial properties.

L36 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 4 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L39 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:847502 CAPLUS
DOCUMENT NUMBER: 142:112921
TITLE: Extension of shelf life of white rice cake and uncooked noodle using chitosan
INVENTOR(S): Im, Jong Hwan; Lee, Jang Wook
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2000030496	A	20000605	KR 2000-10804	20000225
PRIORITY APPLN. INFO.:			KR 2000-10804	20000225

AB Extension of shelf life and prevention of deterioration due to microorganisms in white rice cake and uncooked noodle are provided by using chitosan and lactic acid and which is substitute for alc. White rice cake is soaked or sprayed with the solution of chitosan with lactic acid before packaging. For uncooked noodles, solution of chitosan and lactic acid is added to water for kneading dough or finished noodle is soaked or sprayed with the chitosan solution Thus, the method does not raise the production cost and can increase the effect 2 times compared to the method using alc.

L39 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:172909 CAPLUS
DOCUMENT NUMBER: 138:210388
TITLE: Chitosan-coated web and process for making the same
INVENTOR(S): Tamburro, Maurizio; D'Alesio, Nicola; Pesce, Antonella; Di Cintio, Achille; Carlucci, Giovanni; Tordone, Adelia
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1287835	A1	20030305	EP 2001-120342	20010824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1287836	A2	20030305	EP 2002-18012	20020812
EP 1287836	A3	20030716		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
EP 1287837	A2	20030305	EP 2002-18013	20020812
EP 1287837	A3	20030716		
EP 1287837	B1	20060510		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
AT 325626	T	20060615	AT 2002-18013	20020812
WO 2003018073	A2	20030306	WO 2002-US26998	20020823
WO 2003018073	A3	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003018074	A2	20030306	WO 2002-US26999	20020823
WO 2003018074	A3	20031113		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002327522	A1	20030310	AU 2002-327522	20020823
EP 1418953	A2	20040519	EP 2002-763516	20020823

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

EP 1425049	A2	20040609	EP 2002-766091	20020823

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

BR 2002012094	A	20040803	BR 2002-12094	20020823
BR 2002012095	A	20040803	BR 2002-12095	20020823
JP 2005519653	T	20050707	JP 2003-522589	20020823
JP 2005524416	T	20050818	JP 2003-522588	20020823
US 2004166307	A1	20040826	US 2004-785277	20040224
US 2004167487	A1	20040826	US 2004-785464	20040224
PRIORITY APPLN. INFO.:			EP 2001-120342 A	20010824
			EP 2002-18012 A	20020812
			EP 2002-18013 A	20020812
			WO 2002-US26998 W	20020823
			WO 2002-US26999 W	20020823

AB The present invention relates to a particulate chitosan coated web for use in disposable absorbent articles and a process for making the same. The chitosan particles have a mean diameter of not more than 300 μ. The process involves the step applying onto the surface of a precursor web a solution or a dispersion comprising chitosan material in the form of a spray of droplets having a mean diameter of less than 1500 μ.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:7489 CAPLUS
DOCUMENT NUMBER: 134:71036
TITLE: Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6167652	B1	20010102	US 1999-237065	19990126

PRIORITY APPLN. INFO.: US 1997-787870 B2 19970123
US 1998-13945 B2 19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025734	A1	20000511	WO 1999-EP8105	19991027
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19850734	A1	20000511	DE 1998-19850734	19981104
EP 1131040	A1	20010912	EP 1999-971303	19991027
EP 1131040	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ES 2235551	T3	20050701	ES 1999-971303	19991027

PRIORITY APPLN. INFO.: DE 1998-19850734 A 19981104
WO 1999-EP8105 W 19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:15226 CAPLUS
DOCUMENT NUMBER: 130:43108
TITLE: Cosmetic compositions containing a cationic polymer and an active molecule contained in at least a micro or nanoparticulate vector for treating living or inert surfaces
INVENTOR(S): Derrieu, Guy; Pougnas, Jean Luc; Piat, Jean Philippe Robert Charles; Monginoux, Patricia Anne Laure; Karst, Christian
PATENT ASSIGNEE(S): Virbac S. A., Fr.
SOURCE: Fr. Demande, 18 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2761886	A1	19981016	FR 1997-4549	19970414
FR 2761886	B1	20000505		
US 6500446	B1	20021231	US 1998-59200	19980414

PRIORITY APPLN. INFO.: FR 1997-4549 A 19970414

AB The title compns. are disclosed. A hair lotion contained octyl stearate 8.00, Emulgade SE 6.00, Novasomes 10.00, glycerin 5.00, decyl oleate 4.00, cetearyl alc. 1.50, chitosan glycolate 0.15, phenylethyl alc. 0.20, and water q.s. 69.15%.

L39 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:771319 CAPLUS
DOCUMENT NUMBER: 130:29226
TITLE: Use of sugar derivatives against adhesion of protozoa and parasites
INVENTOR(S): Wolf, Florian; Schreiber, Joerg; Maurer, Peter; Buenger, Joachim
PATENT ASSIGNEE(S): Beiersdorf A.-G., Germany
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19721411	A1	19981126	DE 1997-19721411	19970522

PRIORITY APPLN. INFO.: DE 1997-19721411 19970522

AB Adhesion of pathogenic protozoa and parasites to the skin or organ surfaces is inhibited by topical, oral, or parenteral administration of compns. containing antiadhesive carbohydrates or carbohydrate derivs. such as esters with fatty acids. Thus, a water-in-oil lotion contained paraffin oil 25.00, silicone oil 2.00, ceresin 1.50, lanolin alc. 0.50, glucose sesquiisostearate 2.50, cetearyl glucoside 1.00, perfume, preservative, and H2O to 100.00 weight%.

L39 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:621724 CAPLUS
DOCUMENT NUMBER: 123:17449
TITLE: Hair preparations containing linear polysiloxane-polyoxyalkylene block copolymers and cationic polymers
INVENTOR(S): Dupuis, Christine
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 19 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2709954	A1	19950324	FR 1993-10967	19930915
FR 2709954	B1	19951020		

PRIORITY APPLN. INFO.: FR 1993-10967 19930915

AB The title hair prepns. which have good fixating ability are disclosed. A hair lotion contained Jaguar C 13S 1, a linear polysiloxane-polyoxyalkylene block copolymer 1, EtOH 8.6, perfumes and preservatives q.s., and water q.s. 100g.

L39 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8907395	A1	19890824	WO 1989-US429	19890207
W: AU, BR, DK, FI, JP, NO, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8931926	A	19890906	AU 1989-31926	19890207
ZA 8901214	A	19891129	ZA 1989-1214	19890216

PRIORITY APPLN. INFO.:

US 1988-158227	A	19880219
US 1988-251693	A	19880927
WO 1989-US429	A	19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L41 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.: KR 2003-31616 A 20030519
WO 2004-KR410 W 20040227

AB The present invention relates to a method for producing a chitosan-bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:185865 CAPLUS
DOCUMENT NUMBER: 112:185865
TITLE: Polyurethane sheet containing chitosan salts for treatment of decubitus ulcer
INVENTOR(S): Morita, Isamu; Sugimoto, Tadayuki
PATENT ASSIGNEE(S): Daiichi Kogyo Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 01207238	A	19890821	JP 1988-33552	19880215
PRIORITY APPLN. INFO.:			JP 1988-33552	19880215

AB A sheet for treatment of decubitus ulcer consists of a polyurethane foam sheet containing chitosan salt particles. Thus, a cream was prepared using polyurethane 390 and chitosan lactate 4.5 parts by weight with foam-producing agents and a thickener, and spread over a nonwoven sheet of polyester.

L42 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:716545 CAPLUS
DOCUMENT NUMBER: 135:222846
TITLE: Salt- and drought-resistant agent for plant and its application
INVENTOR(S): Zhao, Kefu; Cao, Ziyi; Song, Jie; Zhang, Hui; Zhao, Yanxiu
PATENT ASSIGNEE(S): Shandong Normal University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1290483	A	20010411	CN 1999-112463	19990930
PRIORITY APPLN. INFO.:			CN 1999-112463	19990930

AB The title agent contains gibberellin compds. from one or more of GA3, GA7, GA4 and their K or Na salts, salicylic acid derivs. from one or more of Na salicylate, K salicylate, Ca salicylate, Me salicylate, Et salicylate and Pr salicylate, amino oligosaccharide (O-carboxymethyl chitosan), and calcium salt from one or more of CaCl2, Ca(NO3)2, Ca(Ac)2, Ca propionate, Ca butyrate, Ca valerate, Ca citrate, etc. Vitamins, amino acids, plant growth regulators, organic acid, mineral substance, surfactant, polysaccharides can be added to the agent. The agent is suitable for the crops growing in salty soil, and used to immerse seeds, spray seedlings or mix with seeds. The agent is drought-resistant and salt-resistant.

L42 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:545443 CAPLUS
DOCUMENT NUMBER: 135:126914
TITLE: Hair aerosol foams containing thickeners and propellants
INVENTOR(S): Schmenger, Juergen; Abels, Wilhelm; Jahedshoar, Mehrdad
PATENT ASSIGNEE(S): Wella A.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052800	A1	20010726	WO 2001-EP32	20010104
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10002513	A1	20010816	DE 2000-10002513	20000121
AU 2001025131	A5	20010731	AU 2001-25131	20010104
EP 1162938	A1	20011219	EP 2001-900386	20010104
EP 1162938	B1	20031105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

BR 2001004147	A	20020115	BR 2001-4147		20010104
JP 2003520219	T	20030702	JP 2001-552848		20010104
AT 253350	T	20031115	AT 2001-900386		20010104
US 2002197213	A1	20021226	US 2002-937228		20020128
US 6737046	B2	20040518			
PRIORITY APPLN. INFO.:			DE 2000-10002513	A	20000121
			WO 2001-EP32	W	20010104

OTHER SOURCE(S): MARPAT 135:126914

AB A composition for a hair preparation is disclosed, preferably in the form of an optically clear, transparent or translucent product which can be used as an aerosol foam. The composition contains (A) at least one nonionic, amphiphilic associative thickener in a suitable cosmetic base and (B) at least one propellant. The agent can be used as a leave-in hair cure or as a hair rinse for conditioning hair and providing it with shine and volume Thus, a mild hair formulation contained Arquad-1225 0.8, Dow Corning-193 1.0, Pure Thix M 1.0, Rewoteric AMCAS 0.5, and water to 100 g. The composition also contained di-Me ether and F152a.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:7489 CAPLUS
DOCUMENT NUMBER: 134:71036
TITLE: Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6167652	B1	20010102	US 1999-237065		19990126
PRIORITY APPLN. INFO.:			US 1997-787870	B2	19970123
			US 1998-13945	B2	19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000025734	A1	20000511	WO 1999-EP8105		19991027
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
DE 19850734	A1	20000511	DE 1998-19850734		19981104
EP 1131040	A1	20010912	EP 1999-971303		19991027
EP 1131040	B1	20041215			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
ES 2235551	T3	20050701	ES 1999-971303		19991027
PRIORITY APPLN. INFO.:			DE 1998-19850734	A	19981104
			WO 1999-EP8105	W	19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:375432 CAPLUS
DOCUMENT NUMBER: 131:23503
TITLE: Vaccine compositions for mucosal administration comprising chitosan
INVENTOR(S): Makin, Jill Catherine; Bacon, Andrew David
PATENT ASSIGNEE(S): Medeva Europe Limited, UK
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9927960	A1	19990610	WO 1998-GB3534		19981127
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2310718	A1	19990610	CA 1998-2310718		19981127
AU 9915691	A	19990616	AU 1999-15691		19981127
AU 745934	B2	20020411			
EP 1051190	A1	20001115	EP 1998-959998		19981127
EP 1051190	B1	20031001			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001524532	T	20011204	JP 2000-522945		19981127
NZ 504504	A	20020531	NZ 1998-504504		19981127
AT 250937	T	20031015	AT 1998-959998		19981127
NO 2000002741	A	20000526	NO 2000-2741		20000526
US 6534065	B1	20030318	US 2000-583124		20000530
PRIORITY APPLN. INFO.:			GB 1997-25084	A	19971128
			WO 1998-GB3534	W	19981127

AB The invention provides a vaccine composition adapted for mucosal administration; the composition comprising one or more influenza vaccine

antigens and an effective adjuvant amount of an acid addition salt of a chitosan wherein the chitosan is a deacetylated chitin which is at least 80 % deacetylated and has a weight average mol. weight of between 10,000 and 100,000.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:172578 CAPLUS
DOCUMENT NUMBER: 130:227723
TITLE: In situ formation of bioadhesive polymeric material
INVENTOR(S): Dettmar, Peter William; Jolliffe, Ian Gordon; Skaugrud, Oyvind
PATENT ASSIGNEE(S): Reckitt & Colman Products Limited, UK
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9909962	A1	19990304	WO 1998-GB2410		19980810
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
GB 2328443	A	19990224	GB 1998-17093		19980807
GB 2328443	B	20010905			
CA 2301165	A1	19990304	CA 1998-2301165		19980810
AU 9887389	A	19990316	AU 1998-87389		19980810
AU 737714	B2	20010830			
EP 1007015	A1	20000614	EP 1998-938785		19980810
EP 1007015	B1	20030709			
R: AT, CH, DE, ES, FR, GB, GR, IT, LI, SE					
BR 9811245	A	20000718	BR 1998-11245		19980810
HU 200003602	A2	20010328	HU 2000-3602		19980810
JP 2001513549	T	20010904	JP 2000-507353		19980810
AT 244562	T	20030715	AT 1998-938785		19980810
ES 2198062	T3	20040116	ES 1998-938785		19980810
ZA 9807516	A	19990222	ZA 1998-7516		19980820
MX 200001818	A	20001026	MX 2000-1818		20000221
US 6391294	B1	20020521	US 2000-485771		20000412
PRIORITY APPLN. INFO.:			GB 1997-17626	A	19970821
			GB 1997-17627	A	19970821
			WO 1998-GB2410	W	19980810

AB The invention provides a pharmaceutically acceptable polymeric material formed in situ at a body surface and a process for the preparation of material. The polymeric material is formed by applying an anionic polymer and a cationic polymer to the surface in the presence of water. Thus, an anionic solution contained sodium alginate 2, and methylparaben (preservative) 0.1 g, flavors, sweeteners, and colors q.s. and water to 100 mL. A cationic solution contained chitosan chloride (Seacure CL 211) 0.4 and methylparaben (preservative) 0.1 g, flavors, sweeteners, colors q.s. and water to 100 mL. Dissolve the Me paraben, flavors, sweeteners and colors in the water. Between 0.2 and 1 mL of each solution may be sprayed simultaneously onto the back of the throat to form a soothing protective film. This film is of particular benefit to those suffering from a sore throat.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:519876 CAPLUS
DOCUMENT NUMBER: 129:132548
TITLE: Chitosan salts as crop yield enhancers.
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832335	A1	19980730	WO 1998-US1331	19980122
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2278301	A1	19980730	CA 1998-2278301	19980122
AU 9862484	A	19980818	AU 1998-62484	19980122
EP 964616	A1	19991222	EP 1998-904665	19980122
EP 964616	B1	20030102		
R: DE, ES, FR, GB, IT, NL, PT, IE				
BR 9806926	A	20000502	BR 1998-6926	19980122
JP 2001507361	T	20010605	JP 1998-532152	19980122
ES 2189133	T3	20030701	ES 1998-904665	19980122
MX 9906833	A	20000531	MX 1999-6833	19990722
PRIORITY APPLN. INFO.:			US 1997-787870 A	19970123
			WO 1998-US1331 W	19980122

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties have an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5 weight% chitosan salt using conventional agricultural equipment and techniques.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 8907395	A1	19890824	WO 1989-US429	19890207
W: AU, BR, DK, FI, JP, NO, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8931926	A	19890906	AU 1989-31926	19890207
ZA 8901214	A	19891129	ZA 1989-1214	19890216
PRIORITY APPLN. INFO.:			US 1988-158227	A 19880219
			US 1988-251693	A 19880927
			WO 1989-US429	A 19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L42 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313
PRIORITY APPLN. INFO.:			JP 1987-59229	19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L42 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:572265 CAPLUS
DOCUMENT NUMBER: 87:172265
TITLE: Studies on the utilization of crab shell waste - chitosan as a coagulating agent
AUTHOR(S): Fujita, Takao; Yamauchi, Takafumi; Yanagisawa, Ikuko; Hiroi, Osamu
CORPORATE SOURCE: Cent. Res. Lab., Nippon Suisan Co., Ltd., Tokyo, Japan
SOURCE: Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku (1976), 11, 49-55
CODEN: NSKHA2; ISSN: 0369-5735
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB HCHO was sprayed on powdered chitin prepared from king crab shell to obtain chitosan salt containing H2O 10 and HCHO 18%, which was used for coagulation of clay suspension, wastewater from processing of ground fish meat, and activated sludge. In the coagulation test of clay

suspension with 0.1-20 ppm chitosan, the coagulation and settling of clay particles were accelerated with increasing chitosan salt . The chitosan salt also had good coagulation effect for wastewater from ground fish meat processing and activated sludge.

L42 ANSWER 23 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L42 ANSWER 24 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2003477091 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14553988
TITLE: Alkaline chitosan solutions.
AUTHOR: Muzzarelli Corrado; Tosi Giorgio; Francescangeli Oriano; Muzzarelli Riccardo A A
CORPORATE SOURCE: Institute of Biochemistry, Faculty of Medicine, Polytechnic University of Marche, Via Ranieri 67, IT-60100 Ancona, Italy.
SOURCE: Carbohydrate research, (2003 Oct 10) Vol. 338, No. 21, pp. 2247-55.
Journal code: 0043535. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200407
ENTRY DATE: Entered STN: 15 Oct 2003
Last Updated on STN: 29 Jul 2004
Entered Medline: 28 Jul 2004

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solutions into saturated ammonium hydrogen carbonate. Incubation at 20 degrees C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO(2)(-)NH(4)(+) a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, molecular sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate and lactate salts. Their

hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solutions at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 degrees C). Citrate could cross-link chitosan and impart insolubility to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH(4)HCO(3) treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solutions of mixed chitosan carbamate and alginate were spray-dried at 115 degrees C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 micron.

L42 ANSWER 25 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2003320948 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12851047
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Petrachi M; Orienti I; Zecchi V
CORPORATE SOURCE: University of Bologna, Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: Journal of microencapsulation, (2003 Jul-Aug) Vol. 20, No. 4, pp. 473-8.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200311
ENTRY DATE: Entered STN: 10 Jul 2003
Last Updated on STN: 18 Dec 2003
Entered Medline: 26 Nov 2003

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate (CH-Asp), chitosan glutamate (CH-Glu) and chitosan hydrochloride (CH-HCl) were prepared by freeze-drying and coated with stearic, palmitic, myristic and lauric acids by spray -drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the freeze-dried and spray -dried systems at pH 2.0 and 7.4.

L42 ANSWER 26 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2002257824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11996810
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery.
AUTHOR: Orienti I; Cerchiara T; Luppi B; Bigucci F; Zuccari G; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Via S. Donato 19/2, 40127, Bologna, Italy.. orienti@biocfarm.unibo.it
SOURCE: International journal of pharmaceutics, (2002 May 15) Vol. 238, No. 1-2, pp. 51-9.
Journal code: 7804127. ISSN: 0378-5173.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 9 May 2002
Last Updated on STN: 28 Jun 2002
Entered Medline: 27 Jun 2002

AB Chitosan (CH) was dissolved in aqueous solutions containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solutions by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behaviour of SD from the physical mixture during gastrointestinal transit. The physical mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with beta-glucosidase at pH 7.0 enhanced the release rate. Among the CH salts used, glutamic and aspartic salts provided the best control of release.

L42 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L42 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1058021 CAPLUS
DOCUMENT NUMBER: 142:43406
TITLE: Hair preparations containing fluorescent nanoparticle compositions
PATENT ASSIGNEE(S): Wella AG, Germany
SOURCE: Ger. Gebrauchsmusterschrift, 34 pp.
CODEN: GGXXFR
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 202004012607	U1	20041209	DE 2004-202004012607	20040812
PRIORITY APPLN. INFO.:			DE 2004-202004012607	20040812

AB The invention concerns hair prepns. that contain composite nanoparticles that are prepared from a metal or non-metal core and an organic polymer shell; the nanoparticles are fluorescent. Cores are formed preferably from an oxide ceramics; the polymer coating itself can be fluorescent. There can be a layer between the core and the shell that is composed of polyarom. fluorescence substances. The nanocomposites can be prepared by plasma technol. The nanoparticles are included in the hair prepns. along with hair care substances, polysiloxanes, thickening agents, sunscreens, preservatives, non-fluorescent hair dyes, surfactants, oxidants, and reducing substances. Thus a hair styling cream contained (weight/weight%): PMMA-Fe2O3 0.50; hdyroxyethylcellulose 0.10; carbomer 0.50; propyleneglycol 1.50; methylparaben 0.20; aminomethylpropanol 0.39; polyvinylpyrrolidone 1.50; glycerin 1.00; water to 100.

L42 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227

US 2005232999	A1	20051020	US 2004-518419	20041217
PRIORITY APPLN. INFO.:			KR 2003-31616 A	20030519
			WO 2004-KR410 W	20040227

AB The present invention relates to a method for producing a chitosan-bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:999284 CAPLUS
DOCUMENT NUMBER: 142:279143
TITLE: Process for producing salted fish with seaweeds powder, mugwort extract, green tea extract and chitosan solution
INVENTOR(S): Kim, Deuk Gi
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003094199	A	20031211	KR 2003-83704	20031124
PRIORITY APPLN. INFO.:			KR 2003-83704	20031124

AB A process for producing a salted fish with seaweeds powder, a mugwort extract, a green tea extract and a chitosan solution is provided, thereby preventing adult diseases, removing fishy smell, and preserving freshness of the fish for a long time. The process comprises the steps of: washing and removing internal organs of fish; spraying salts on the fish; spraying seaweeds powder on the surface of the fish; maturing the salted and seaweeds powder sprayed fish; and packaging the matured fish under vacuum condition, wherein the seaweeds include tangleweed, brown seaweed and brown algae; the matured fish may be further dipped in mugwort or green tea extract; the matured fish may be further coated with a chitosan solution

L42 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α-chitosan is obtained from shells of crab and shrimp and β-chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L42 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L42 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was

retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:566810 CAPLUS
DOCUMENT NUMBER: 140:64869
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Petrachi, M.; Orienti, I.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: Journal of Microencapsulation (2003), 20(4), 473-478
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by freeze drying and coated with stearic, palmitic, myristic and lauric acids by spray-drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained

release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:658743 CAPLUS
DOCUMENT NUMBER: 137:190771
TITLE: Chitosan-containing solution for prophylactic treatment of teats of lactating animals
INVENTOR(S): Hellman, Asa; Mathisen, Torbjorn
PATENT ASSIGNEE(S): Swed.
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119949	A1	20020829	US 2001-791739	20010226
CA 2439465	A1	20020906	CA 2002-2439465	20020225
WO 2002067952	A1	20020906	WO 2002-SE318	20020225
WO 2002067952	A8	20040521		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1372672	A1	20040102	EP 2002-700937	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007531	A	20040309	BR 2002-7531	20020225
JP 2005508835	T	20050407	JP 2002-567318	20020225
PRIORITY APPLN. INFO.:			US 2001-791739 A	20010226
			WO 2002-SE318 W	20020225

AB An aqueous solution for prophylactic treatment of teats of lactating cows comprises as a first component at least partially deacetylated chitosan or its acid addition salt in a concentration of up to about 2% by weight of chitosan. A pH solution of the solution is adjusted to about 4-6.8 by the addition of a mineral or organic acid. The first component has a mol. weight such that the viscosity of the solution is < 50 mPas. The aqueous solution further comprises a second component selected from heparin, heparan sulfate, and dextran sulfate, the weight ratio between the first and second components being from about 10:1 to about 100:1. For example, 5.8 g 87% glycerol was added to 95 mL of water and 0.3 mL acetic acid (99.9%) was added to the glycerol solution under stirring until a homogeneous solution was obtained. To the solution prepared was then added 1.0 g chitosan (MW of about 80 kD, deacetylation degree 94% (Primex)) and stirring was maintained until all chitosan has been dissolved. The pH of this solution was about 5.2. The solution showed improved stability and resulted in a viscosity lying within the preferred range and

enabling easy handling in connection with the application to the teats.

L42 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:123584 CAPLUS
DOCUMENT NUMBER: 136:184114
TITLE: Preparation of therapeutic water-soluble salts of 2-difluoromethyl-2,5-diaminopentanoic acid and polycations
INVENTOR(S): Hebert, Rolland F.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002019338	A1	20020214	US 2001-919692	20010731
US 6630511	B2	20031007		
US 2004006045	A1	20040108	US 2003-614713	20030707
PRIORITY APPLN. INFO.:			US 2000-222420P P	20000801
			US 2001-919692 A3	20010731

AB Water-soluble salts of 2-difluoromethyl-2,5-diaminopentanoic acid (DFMO) with polycations (e.g., 80% deacetylated chitosan) are prepared and their therapeutic uses described.

L42 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:781455 CAPLUS
DOCUMENT NUMBER: 135:335172
TITLE: Therapeutically improved salts of azelaic acid
INVENTOR(S): Hebert, Rolland F.

PATENT ASSIGNEE(S): Hebert, Rolland, USA
SOURCE: U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001034321	A1	20011025	US 2001-791358	20010223
US 6734210	B2	20040511		
PRIORITY APPLN. INFO.:			US 2000-184750P P	20000224

AB Stable salts of azelaic acid with polycations such as chitosan are described. The salts according to the invention are water-soluble, therapeutically more efficacious and are valuable for use as active constituents in pharmaceutical as well as cosmeceutical compns. A salt was prepd, by the reaction of azelaic acid with chitosan. A 20% cream prepared from the above salt was applied to the fore-arm of 10 individuals. After 2 wk, no redness, irritation or scaling was observed

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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     (FILE 'HOME' ENTERED AT 11:43:50 ON 04 JAN 2007)

     FILE 'CAPLUS, MEDLINE' ENTERED AT 11:44:08 ON 04 JAN 2007
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L2           32 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER?
L3           12 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER? (P) DRY?
L4            9 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER? (P) DRIED
L5            1 S CHITOSAN? (P) SALT? PARTICLES  (P) SPRAY?
L6            2 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE (P) SPRAY?
L7           11 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE
L8           11 S CHITOSAN? (P) ?SALT? (P) BLOOD PRESSURE
L9           77 S CHITOSAN? (P) ?SALT? (P) SPRAY?
L10          31 S CHITOSAN? (P) ?SALT? (P) SPRAY? (P) DRY?
L11          19 S L10 NOT L3
L12          46 S L9 NOT L10
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L14           2 S L12 AND BIND?
L15          45 S L12 AND ON SALT?
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L18           0 S L12 AND "SPRAYING THE CHITOSAN"
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L36           4 S L35 AND DRY?
L37           4 S L35 AND DRIED
L38          11 S L35 NOT L36
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L41           2 S L40 AND SALT PARTICLES?
L42          26 S L40 AND SPRAY?
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L6            2 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE (P) SPRAY?
L7           11 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE
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L9           77 S CHITOSAN? (P) ?SALT? (P) SPRAY?
L10          31 S CHITOSAN? (P) ?SALT? (P) SPRAY? (P) DRY?
L11          19 S L10 NOT L3
L12          46 S L9 NOT L10
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L15          45 S L12 AND ON SALT?
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L17           0 S L12 AND "SPRAYING CHITOSAN"
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L34         182 S ?CHITOSAN-LACTATE?
L35          15 S L34 AND SPRAY?
L36           4 S L35 AND DRY?
L37           4 S L35 AND DRIED
L38          11 S L35 NOT L36
L39           8 S L38 NOT L37
L40         330 S ?CHITOSAN-SALT?
L41           2 S L40 AND SALT PARTICLES?
L42          26 S L40 AND SPRAY?
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L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1277288 CAPLUS
TITLE: Salt resistance and its mechanism of cucumber under effects of exogenous chemical activator
AUTHOR(S): Song, Shiqing; Liu, Wei; Guo, Shirong; Shang, Qingmao; Zhang, Zhigang
CORPORATE SOURCE: Department of Horticulture and Gardening, Hebei Normal University of Science and Technology, Changli, 066600, Peop. Rep. China
SOURCE: Yingyong Shengtai Xuebao (2006), 17(10), 1871-1876
CODEN: YSXUER; ISSN: 1001-9332
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB With root injection and foliar spray, this paper studied the effects of different concns. salicylic acid, brassinolide, chitosan and spermidine on the growth, morphogenesis, and physiol. and biochem. characters of cucumber (Cucumis sativus L.) seedlings under 200 mmol · L-1 NaCl stress. The results showed that at proper concns., these four exogenous chemical activators could markedly decrease the salt stress index and mortality of cucumber seedlings, and the decrement induced by 0.01 mg · L-1 brassinolide was the largest, being 63.0% and 75.0%, resp. The activities of superoxide dismutase (SOD), peroxidase (POD) and catalase (CAT) increased significantly, resulting in a marked decrease of malondialdehyde (MDA) content and electrolyte leakage. The dry weight water content and morphogenesis of cucumber seedlings improved, and the stem diameter, leaf number, and healthy index increased significantly. All of these suggested that exogenous chemical activators at proper concns. could induce the salt resistance of cucumber, and mitigate the damage degree of salt stress. The salt resistance effect of test exogenous chemical activators decreased in the sequence of 0.005 .apprx. 0.05 mg · L-1 brassinolide, 150 .apprx. 250 mg · L-1 spermidine, 100 .apprx. 200 mg · L-1 chitosan, and 50 .apprx. 150 mg · L-1 salicylic acid.

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:752406 CAPLUS
DOCUMENT NUMBER: 145:187492
TITLE: Film-forming liquid composition for preservation of salted pork in jelly
INVENTOR(S): Chang, Zhongyi; Zhao, Ning; Wang, Chunsheng
PATENT ASSIGNEE(S): Nanjing Yurun Food Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1806567	A	20060726	CN 2006-10038056	20060126
PRIORITY APPLN. INFO.:			CN 2006-10038056	20060126

AB The title liquid composition comprises food-grade lactic acid 0.8-2%, chitosan 0.8-1.2%, nisin 0.008-0.012%, and water as balance. The composition is sprayed onto salted pork in jelly and can form a preservative film after air-drying, which can destroy microbial enzyme system, prohibit microbial respiration, and kill bacteria by influencing cell wall permeability and prohibiting synthesis of cell wall. With the preservative film, the storage life of salted pork in jelly at 0-4°C is prolonged for about 15 days without adverse effect on the appearance and taste of salted

pork in jelly.

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723693 CAPLUS
DOCUMENT NUMBER: 145:165999
TITLE: Method for manufacturing chitosan-containing toasted laver
INVENTOR(S): Jung, Bong Im
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050265	A	20040616	KR 2002-78050	20021210
PRIORITY APPLN. INFO.:			KR 2002-78050	20021210

AB A method for manufacturing chitosan containing toasted laver is used to improve taste, flavor, and nutrients of toasted laver and to enhance health benefits. Manufacture comprises the steps of: drying fresh laver to a water content of 15-18%; covering the dried laver with mixed oil consisting of 80-90% soybean oil and 10-20% sesame oil; toasting the oil-covered laver at 180-220° for 3-7 s; covering the first toasted laver with the mixed oil; drying crustacean shells at 40-60° for 4-5 h and pulverizing to obtain a chitosan powder; spraying the chitosan powder and salt on the toasted laver; toasting the chitosan- and salt-sprayed laver at 280-320° for 3-7 s; and cutting and packaging the toasted laver.

L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:47114 CAPLUS
DOCUMENT NUMBER: 144:240009
TITLE: Reverse temperature sensitive in-situ formation type implanting agent for injection
INVENTOR(S): Lin, Ying; Zhu, Dequan; Ding, Fuxin; Zan, Jia; Jiang, Guoqiang
PATENT ASSIGNEE(S): Tsinghua University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1631357	A	20050629	CN 2004-10009786	20041112
PRIORITY APPLN. INFO.:			CN 2004-10009786	20041112

AB The process comprises dissolving or suspending the cellulose derivative salting-out salt in release sustaining/controlling microencapsulating material solution, spray drying to obtain microencapsulated salt; dissolving the cellulose derivative, polyethylene glycol, and the microencapsulated salt in water to the concentration of 1-3.5, 1-15, and 1-30%, resp., sterilizing, and freeze drying. The cellulose derivative is hydroxypropyl cellulose, hydroxypropyl Me cellulose, Et hydroxyethyl cellulose, and/or Me cellulose. The salt is chloride, phosphate, sulfate, lactate, or citrate. The microencapsulating material is Na CM-cellulose, hydroxypropyl Me cellulose, cellulose acetate, Et cellulose, cellulose acetate phthalate, acrylic resin, gelatin, and/or chitosan.

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:414487 CAPLUS
DOCUMENT NUMBER: 142:487632
TITLE: Hydrotalcite-based blood purifying adsorbent and its preparation
INVENTOR(S): Ye, Ying; Zheng, Libo; Wang, Pu; Shen, Zhongyue; Zhong, Huaiyang
PATENT ASSIGNEE(S): Zhejing University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1431043	A	20030723	CN 2003-115015	20030120
PRIORITY APPLN. INFO.:			CN 2003-115015	20030120

AB The blood purifying adsorbent, a chitosan or gelatin-like substance-encapsulated hydrotalcite-[M1- xIIMIIIx(OH)2]Ax mH2O (MII = Mg2+, Zn2+, Fe2+, or other divalent metal ion; MIII = trivalent metal ion; A = Cl- or NO3-; and x = 0.2-0.33), is prepared by adding hydrotalcite in 1-8% chitosan-1-8% gelatin-like substance solution, heating at 30-60°C for 2-6 h under bubbling N2, spraying into 0.1-5% NaOH solution to solidify, separating, washing, and vacuum drying. The gelatin-like substance is gelatin, agar, and/or agarose. The hydrotalcite is prepared by dissolving Mg salt and Al salt in water to obtain 0.5-1.0M Mg salt-0.2-0.5M Al salt solution, co-dropping with 1.5-2.5M NaOH solution in water under bubbling N2, stirring at 50-80°C for 10-24 h, vacuum drying, and grinding to <200 mesh. The Mg salt is MgCl2 or Mg(NO3)2. The Al salt is AlCl3 or Al(NO3)3.

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519

EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217
PRIORITY APPLN. INFO.:			KR 2003-31616	A 20030519
			WO 2004-KR410	W 20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:726046 CAPLUS
DOCUMENT NUMBER: 142:62449
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets
AUTHOR(S): Nunthanid, J.; Laungtana-anan, M.; Sriamornsak, P.; Limmatvapirat, S.; Puttipipatkhachorn, S.; Lim, L. Y.; Khor, E.
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom, 73000, Thailand
SOURCE: Journal of Controlled Release (2004), 99(1), 15-26
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A chitosan derivative as an acetate salt was successfully prepared by a spray drying technique. Physicochem. characteristics and micrometric properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 μm in diameter The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform IR (FTIR) and solid-state 13C NMR spectroscopy demonstrated the functional groups of an acetate salt in its mol. structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt, heated at 120°C for 12 h, revealed the evidence of the conversion of chitosan acetate mol. structure to N-acetylglucosamine at higher temperature No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% weight/weight SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, resp. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:272084 CAPLUS
DOCUMENT NUMBER: 136:261821
TITLE: Method comprising flocculation clarification and ultrafiltration concentration of producing composite immunoreactive proteins from chicken egg
INVENTOR(S): Yang, Yanjun
PATENT ASSIGNEE(S): Jiangnan Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1312295	A	20010912	CN 2001-108225	20010221
CN 1129609	B	20031203		
PRIORITY APPLN. INFO.:			CN 2001-108225	20010221

AB The process comprises isolating egg yolk from fresh egg; extracting with water at pH 4.8-7.7 for 5-25 min; centrifuging or precipitating for 5-18 h to obtain egg yolk extract; flocculating with 0.2-1.1% flocculant (composed of soluble Ca salt such as Ca(OAc)2 or Ca lactate, chitosan , and phosphate such as Na3PO4 or K3PO4 at a ratio of 0.02-0.3:0-0.12:0.16-0.68) at pH 4.5-8.5 for 5-20 min; standing for 20-60 min; filtering or centrifuging; ultrafiltering with ultrafilter membrane (such as cellulose acetate membrane, modified polysulfone membrane, polyether sulfone membrane, or polyvinylidene fluoride membrane); sterilizing with 0.22 μm ultrafilter membrane; and freezing at -30 to -50°C for 24 h. Fresh eggs are collected from chicken immunized with pathogenic bacteria from human intestine, virus, or caries bacteria. The content of transferrin in the immunoreactive protein was >10%. The isolated chicken immunoreactive proteins comprising Igs. and transferrin are useful as nutrition supplement for infant formula. The method also produces byproducts such as egg-yolk powder and egg-white powder by spray -drying for food purpose.

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:23468 CAPLUS
DOCUMENT NUMBER: 130:100718
TITLE: Toilet seat cleaners containing chitosan and quaternary ammonium salts
INVENTOR(S): Takano, Izumi; Takahashi, Yukiko
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11001700	A	19990106	JP 1997-157205	19970613
PRIORITY APPLN. INFO.:			JP 1997-157205	19970613

AB The cleaners contain chitosan and quaternary ammonium salts, preferably benzalkonium chloride (I). The cleaners are directly sprayed over a toilet seat or used by impregnating cotton, gauze, or nonwoven fabrics with them. The cleaners show long-lasting disinfectant effect. Water 40, glacial acetic acid

0.13, Flonac C 0.25, I 0.1, glycerin 1.0, and EtOH 47.4 weight parts were mixed to give a toilet cleaner. The cleaner showed quick drying property and good antibacterial effect.

L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:690526 CAPLUS
DOCUMENT NUMBER: 123:226085
TITLE: Surface structures and surface-active components in food emulsions
AUTHOR(S): Bergenstaahl, Bjoern; Faeldt, Pia; Malmsten, Martin
CORPORATE SOURCE: INSTITUTE SURFACE CHEMISTRY, Stockholm, S-114 86, Swed.
SOURCE: Special Publication - Royal Society of Chemistry (1995), 156(Food Macromolecules and Colloids), 201-14
CODEN: SROCDO; ISSN: 0260-6291
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review, with 23 refs. Food emulsions are complex mixts., and they usually contain both low-mol.-weight surface active lipids and a versatile range of more or less surface-active proteins and polysaccharides. In systems containing several surface-active components, 3 types of adsorbed layers can be identified, based on how the layers are formed. The properties of these adsorption structures (competitive adsorption, associative adsorption, and layered adsorption) are discussed, and examples demonstrating these ideas in different systems are presented. Competitive adsorption at the air-water interface during spray drying, adsorption of apoproteins to phospholipid surfaces, adsorption of chitosan to bile salt + phospholipid surfaces, adsorption of hydrocolloids to emulsifier surfaces, and other topics are detailed.

L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:635078 CAPLUS
DOCUMENT NUMBER: 115:235078
TITLE: Nonwood fiber-based paper with good printability
INVENTOR(S): Kanayama, Nozomi; Endo, Akitaro
PATENT ASSIGNEE(S): Daifuku Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03167388	A	19910719	JP 1989-308119	19891127
PRIORITY APPLN. INFO.:			JP 1989-308119	19891127

AB The title paper is made from pulps containing bast and/or leaf fibers and water-insol. fibrous CM-cellulose and salts and is coated with chitosan at least on its printing surface. Thus, handsheets (basis weight 40 g/m2) of 90:10 manila hemp fibers and CM-cellulose (degree of substitution 0.33) were sprayed with a .apprx.2% solution of 1:1 chitosan-glycolic acid (dry pickup 0.5%), and dried at 120° on a mirror drum. The sheets had better strength and printability than without CM-cellulose or chitosan.

L3 ANSWER 12 OF 12 MEDLINE on STN
ACCESSION NUMBER: 2004437121 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15342177
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets.
AUTHOR: Nunthanid J; Laungtana-Anan M; Sriamornsak P; Limmatvapirat S; Puttipipatkhachorn S; Lim L Y; Khor E
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of

Pharmacy, Silpakorn University, Nakhon Pathom 73000, Thailand.. jurairat@email.pharm.su.ac.th
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (2004 Sep 14) Vol. 99, No. 1, pp. 15-26.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200503
ENTRY DATE: Entered STN: 3 Sep 2004
Last Updated on STN: 5 Mar 2005
Entered Medline: 4 Mar 2005
AB A chitosan derivative as an acetate salt was successfully prepared by using a spray drying technique. Physicochemical characteristics and micromeritic properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 microm in diameter. The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform infrared (FTIR) and solid-state (13)C NMR spectroscopy demonstrated the functional groups of an acetate salt in its molecular structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt , heated at 120 degrees C for 12 h, revealed the evidence of the conversion of chitosan acetate molecular structure to N-acetylglucosamine at higher temperature. No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% w/w SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, respectively. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:723693 CAPLUS
DOCUMENT NUMBER: 145:165999
TITLE: Method for manufacturing chitosan-containing toasted laver
INVENTOR(S): Jung, Bong Im
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004050265	A	20040616	KR 2002-78050	20021210
PRIORITY APPLN. INFO.:			KR 2002-78050	20021210

AB A method for manufacturing chitosan containing toasted laver is used to improve taste, flavor, and nutrients of toasted laver and to enhance health benefits. Manufacture comprises the steps of: drying fresh laver to a water content of 15-18%; covering the dried laver with mixed oil consisting of 80-90% soybean oil and 10-20% sesame oil; toasting the oil-covered laver at 180-220° for 3-7 s; covering the first toasted laver with the mixed oil; drying crustacean shells at 40-60° for 4-5 h and pulverizing to obtain a chitosan powder; spraying the chitosan powder and salt on the toasted laver; toasting the chitosan- and salt-sprayed laver at 280-320° for 3-7 s; and cutting and packaging the toasted laver.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1106018 CAPLUS
TITLE: Production method of miinsol milk
INVENTOR(S): Suh, Young Hun
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001045675	A	20010605	KR 1999-49042	19991105
PRIORITY APPLN. INFO.:			KR 1999-49042	19991105

AB PURPOSE: A method for producing Miinsol milk comprising 72 kinds of foods good for lung and large intestine belong to metal among the five elements(metal, wood, water, fire, and earth), with calcium, chitosan and extract of pine needles or sprouts is provided, to improve physical health and constitution and prevent or treat geriatric diseases. The 72 kinds of foods can be classified according to the five elements(metal, wood, water, fire, and earth), the five cardinal colors(blue, red, yellow, white, and black) and the five tastes(the sweet, sour, salty, bitter, and pungent tastes). CONSTITUTION: The method is characterized by the following steps of: (i) steaming a powdered mixture of the 72 kinds of foods for 2hr and passing through a roller to mash fibroid material of the mixture; (ii) aging the prepared materials in an extra basket at 50-60deg.C for 72hr with spraying herb extract occasionally and steaming for 4hr; (iii) repeating the processes of aging and steaming one more time; (iv) extracting the steamed materials at 20-50deg.C and adding milk to the extract; and then (v) getting Miinsol

milk by mixing calcium, chitosan and extract of pine needles or sprouts with the mixture of milk and the extract. The 72 kinds of foods includes 2.0% of arrowroot, 1.0% of bean sprouts, 35.0% of wild edible greens, 9% of pine needles, 10.0% of Rhynchosia Nulubilis, 1.0% of black bean and adzuki bean, 0.3% of mung beans, 1.0% of arrowroot sprout, 2.0% of pine mushroom, 0.3% of sesame leaf, 2.0% of leek, 1.0% of Indian millet, 1.5% of millet, 10.0% of brown rice, 0.3% each of bean, Artemisia capillaris Thunb., Indangssuk, mugwort, kale, carrot, cabbage, anchovy, dropwort, bean sprouts, dried walleye pollack, Angelica gigas Nakai, spinach, Chinese bellflowers, corn, perilla seed, foxtail millet, barley, black sesame, wild rocambole, Jobs-tear, glutinous rice, sesame, green laver, pine pollen, Hizikia fusiformis, pine buds, brown seaweed, tangleweed, bamboo sprout, sunflower seeds, mulberry leaves, jujube and dropwort, 2.0% of shiitake mushroom, 0.3% of walnut, 2.0% each of Coriolus versicolor and Ganoderma lucidum, 0.3% each of bean leaf, pumpkin seed, apricot, garlic, peanut, persimmon, radish, burdock, lotus root, taro, parsley, and chestnut, 1.0% of old pumpkin, and 0.3% each of radish tops, aster scaber thunb, shepherds purse, green onion, laver, potato, sweet potato and pine nut.

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006
PRIORITY APPLN. INFO.:			KR 2000-60499	20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α- chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:726046 CAPLUS
DOCUMENT NUMBER: 142:62449
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets
AUTHOR(S): Nunthanid, J.; Laungtana-anan, M.; Sriamornsak, P.;

AUTHOR(S): Limmatvapirat, S.; Puttipipatkhachorn, S.; Lim, L. Y.; Khor, E.
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom, 73000, Thailand
SOURCE: Journal of Controlled Release (2004), 99(1), 15-26
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A chitosan derivative as an acetate salt was successfully prepared by a spray drying technique. Physicochem. characteristics and micrometric properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 μm in diameter The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform IR (FTIR) and solid-state 13C NMR spectroscopy demonstrated the functional groups of an acetate salt in its mol. structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt, heated at 120°C for 12 h, revealed the evidence of the conversion of chitosan acetate mol. structure to N-acetylglucosamine at higher temperature No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% weight/weight SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, resp. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:174461 CAPLUS
DOCUMENT NUMBER: 141:179341
TITLE: Microencapsulation of hydrophilic drug substances using biodegradable polyesters. Part II: Implants allowing controlled drug release - a feasibility study using bisphosphonates
AUTHOR(S): Weidenauer, U.; Bodmer, D.; Kissel, T.
CORPORATE SOURCE: Dep. Pharmaceutics and Biopharm., Philipps-Univ., Marburg, D-35032, Germany
SOURCE: Journal of Microencapsulation (2004), 21(2), 137-149
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The prolonged delivery of hydrophilic drug salts from hydrophobic polymer carriers at high drug loading is an ambitious goal. Pamidronate disodium salt (APD) containing implants prepared from spray-dried microparticles were investigated using a laboratory ram extruder. An APD-containing polymer matrix consisting of an APD-chitosan implant embedded in the biodegradable polymer D,L-poly(lactide-co-glycolide acid-glucose) (PLG-GLU) was compared with a matrix system with the micronized drug distributed in the PLG-GLU. The

APD-chitosan matrix system showed a triphasic release behavior at loading levels of 6.86 and 15.54% (weight/weight) over 36 days under in-vitro conditions. At higher loading (31.92%), a drug burst was observed within 6 days due to the formation of pores and channels in the polymeric matrix. In contrast, implants containing the micronized drug showed a more continuous release profile over 48 days up to a loading of 31.78% (weight/weight). At a drug loading of 46.17% (weight/weight), a drug burst was observed Using micronized drug salts and reducing the surface area available for diffusion, parenteral delivery systems for highly water-soluble drug candidates were shown to be tech. feasible at high drug loadings.
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:635078 CAPLUS
DOCUMENT NUMBER: 115:235078
TITLE: Nonwood fiber-based paper with good printability
INVENTOR(S): Kanayama, Nozomi; Endo, Akitaro
PATENT ASSIGNEE(S): Daifuku Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03167388	A	19910719	JP 1989-308119	19891127
PRIORITY APPLN. INFO.:			JP 1989-308119	19891127

AB The title paper is made from pulps containing bast and/or leaf fibers and water-insol. fibrous CM-cellulose and salts and is coated with chitosan at least on its printing surface. Thus, handsheets (basis weight 40 g/m2) of 90:10 manila hemp fibers and CM-cellulose (degree of substitution 0.33) were sprayed with a .apprx.2% solution of 1:1 chitosan-glycolic acid (dry pickup 0.5%), and dried at 120° on a mirror drum. The sheets had better strength and printability than without CM-cellulose or chitosan.

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313
PRIORITY APPLN. INFO.:			JP 1987-59229	19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution

of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L4 ANSWER 8 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2004437121 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15342177
TITLE: Characterization of chitosan acetate as a binder for sustained release tablets.
AUTHOR: Nunthanid J; Laungtana-Anan M; Sriamornsak P; Limmatvapirat S; Puttipipatkhachorn S; Lim L Y; Khor E
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, Silpakorn University, Nakhon Pathom 73000, Thailand.. jurairat@email.pharm.su.ac.th
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (2004 Sep 14) Vol. 99, No. 1, pp. 15-26.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200503
ENTRY DATE: Entered STN: 3 Sep 2004
Last Updated on STN: 5 Mar 2005
Entered Medline: 4 Mar 2005

AB A chitosan derivative as an acetate salt was successfully prepared by using a spray drying technique. Physicochemical characteristics and micromeritic properties of spray-dried chitosan acetate (SD-CSA) were studied as well as drug-polymer and excipient-polymer interaction. SD-CSA was spherical agglomerates with rough surface and less than 75 microm in diameter. The salt was an amorphous solid with slight to moderate hygroscopicity. The results of Fourier transform infrared (FTIR) and solid-state (13)C NMR spectroscopy demonstrated the functional groups of an acetate salt in its molecular structure. DSC and TGA thermograms of SD-CSA as well as FTIR and NMR spectrum of the salt , heated at 120 degrees C for 12 h, revealed the evidence of the conversion of chitosan acetate molecular structure to N-acetylglucosamine at higher temperature. No interaction of SD-CSA with either drugs (salicylic acid and theophylline) or selected pharmaceutical excipients were observed in the study using DSC method. As a wet granulation binder, SD-CSA gave theophylline granules with good flowability (according to the value of angle of repose, Carr's index, and Hausner ratio) and an excellent compressibility profile comparable to a pharmaceutical binder, PVP K30. In vitro release study of theophylline from the tablets containing 3% w/w SD-CSA as a binder demonstrated sustained drug release in all media. Cumulative drug released in 0.1 N HCl, pH 6.8 phosphate buffer and distilled water was nearly 100% within 6, 16 and 24 h, respectively. It was suggested that the simple incorporation of spray-dried chitosan acetate as a tablet binder could give rise to controlled drug delivery systems exhibiting sustained drug release.

L4 ANSWER 9 OF 9 MEDLINE on STN
ACCESSION NUMBER: 2004297256 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15198426
TITLE: Microencapsulation of hydrophilic drug substances using biodegradable polyesters. Part II: Implants allowing controlled drug release--a feasibility study using bisphosphonates.
AUTHOR: Weidenauer U; Bodmer D; Kissel T

CORPORATE SOURCE: Department of Pharmaceutics and Biopharmacy, Philipps-University, D-35032 Marburg, Germany.
SOURCE: Journal of microencapsulation, (2004 Mar) Vol. 21, No. 2, pp. 137-49.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200409
ENTRY DATE: Entered STN: 17 Jun 2004
Last Updated on STN: 15 Sep 2004
Entered Medline: 14 Sep 2004

AB The prolonged delivery of hydrophilic drug salts from hydrophobic polymer carriers at high drug loading is an ambitious goal. Pamidronate disodium salt (APD) containing implants prepared from spray-dried microparticles were investigated using a laboratory ram extruder. An APD-containing polymer matrix consisting of an APD-chitosan implant embedded in the biodegradable polymer D,L-poly(lactide-co-glycolide acid-glucose) (PLG-GLU) was compared with a matrix system with the micronized drug distributed in the PLG-GLU. The APD-chitosan matrix system showed a triphasic release behaviour at loading levels of 6.86 and 15.54% (w/w) over 36 days under in-vitro conditions. At higher loading (31.92%), a drug burst was observed within 6 days due to the formation of pores and channels in the polymeric matrix. In contrast, implants containing the micronized drug showed a more continuous release profile over 48 days up to a loading of 31.78% (w/w). At a drug loading of 46.17% (w/w), a drug burst was observed. Using micronized drug salts and reducing the surface area available for diffusion, parenteral delivery systems for highly water-soluble drug candidates were shown to be technically feasible at high drug loadings.

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.:

KR 2003-31616	A	20030519
WO 2004-KR410	W	20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.: KR 2003-31616 A 20030519
WO 2004-KR410 W 20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L7 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:807957 CAPLUS
DOCUMENT NUMBER: 145:248015
TITLE: Production of functional salt by heating roasted sea salt powder and chitosan to coat effective ingredient of chitosan to surface of sea salt whereby reducing salinity of sea salt and producing functional salt having efficacy of chitosan
INVENTOR(S): Bae, Jo Jung
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004102921	A	20041208	KR 2003-34762	20030530
PRIORITY APPLN. INFO.:			KR 2003-34762	20030530

AB A method of making functional salt by heating roasted sea salt powder and chitosan to coat the effective ingredient of the chitosan to the surface of sea salt is provided. The product is reduced in the salinity of sea salt and has the efficacy of chitosan as well as immunostimulating action, anticancer action, antibacterial action, blood pressure lowering action or the like. Sea salt is roasted at 400 to 1,200 °C in a charcoal kiln and ground to 10 to 30meshes, 100% by weight of the ground sea salt is mixed with 3 to 10% by weight of chitosan and roasted at 200 °C in a stainless steel vessel and then packed. The chitosan is selected from water-soluble chitosan or chitosan oligosaccharide.

L7 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:648539 CAPLUS
DOCUMENT NUMBER: 145:82354
TITLE: Manufacturing method of health seasoning salt including green tea and chitooligosaccharide and health seasoning salt manufactured thereby
INVENTOR(S): Jung, Man Jong
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004001369	A	20040107	KR 2002-36535	20020627
PRIORITY APPLN. INFO.:			KR 2002-36535	20020627

AB Provided are a manufacturing method of health seasoning salt including green tea and chitooligosaccharide and health seasoning salt manufactured thereby. The green tea has anticancer activity and antibacterial activity, lowers blood cholesterol level, and inhibits the increase of blood pressure and decrease of blood glucose level. The chitosan increase immunity, has antibacterial and anticancer activity, decreases blood glucose level, regulates blood cholesterol level, and prevents cardiovascular diseases. The manufacturing method of health

seasoning salt including green tea and chitooligosaccharide comprises the steps of: dissolving 0.1-10% of green tea powder and 0.1-10% of chitooligosaccharide in 100 parts by weight of water; adding salt thereto, followed by stirring for 40-60 min; and naturally drying the mixture in the shade for 12-24 h.

L7 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1138831 CAPLUS
DOCUMENT NUMBER: 144:5825
TITLE: Fermented soybean paste containing chitooligosaccharide
INVENTOR(S): Lee, Won Hui
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2002046272	A	20020620	KR 2002-31047	20020603
PRIORITY APPLN. INFO.:			KR 2002-24561 A	20020503

AB A fermented soybean paste is prepared by using chitooligosaccharide instead of directly using chitin or chitosan during the production of fermented soybean paste or soy sauce. The product has an improved taste and preservability and various physiol. actions such as anticancer activity, an antibacterial action, cholesterol-lowering activity, blood pressure-lowering activity, etc. A mixture of 16-17% by weight fermented soybean, 1-5% by weight chitooligosaccharide, and 17-19% by weight salt, plus water (to 100% by weight) is fermented at ambient temperature for 45-60 days to produce a fermented soybean paste. The filtrate is heated to produce soy sauce.

L7 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519

EP 1631155	A1	20060308	EP 2004-715573		20040227
R: DE, ES, FR, GB, IT					
JP 2006518190	T	20060810	JP 2005-518455		20040227
US 2005232999	A1	20051020	US 2004-518419		20041217
PRIORITY APPLN. INFO.:			KR 2003-31616	A	20030519
			WO 2004-KR410	W	20040227

AB The present invention relates to a method for producing a chitosan -bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:885242 CAPLUS
DOCUMENT NUMBER: 142:133516
TITLE: Functional noodles
INVENTOR(S): Kim, Sook Hee; Woo, Ki Min
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001007980	A	20010205	KR 2000-64506	20001101
PRIORITY APPLN. INFO.:			KR 2000-64506	20001101

AB Functional noodles are provided to extend an expiration date and to prevent high blood pressure and high cholesterol hematoma by adding chitin, chitosan, derivs. from chitin and chitosan, or oligosaccharides to ingredients for manufacturing wet noodle, modified cooked noodle, dry noodle, instant fried noodle and extruded noodle. Functional noodles contain chitin, chitosan, derivs. from chitin and chitosan or oligosaccharides in a range of 0.0001 weight% to 10 weight% comparing to total weight of noodles. Chitosan noodles has 30-62 weight% of flour, 6-13 weight% of starch, 0.1-2 weight% of salt, 0.01-0.2 weight% of alkalis, 0.02-0.12 weight% of gums, 0.001-0.01 weight% of coloring matters, 0.5-1.8 weight% of emulsifier, 0.01-0.05 weight% of polyphosphate salt and 20-25 weight% of water. The functional noodles are hand-beating noodle, wet noodle, buckwheat noodles, cooked noodle, modified cooked noodle, dried noodle, extruded noodles like pasta, iced vermicelli and Chinese noodles.

L7 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent

LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006
PRIORITY APPLN. INFO.:			KR 2000-60499	20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan .

L7 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:833007 CAPLUS
DOCUMENT NUMBER: 135:370991
TITLE: Compositions containing peptide and electrolyte excretion promoter and foods containing the same
INVENTOR(S): Takahashi, Ryuji; Yomoda, Satoshi
PATENT ASSIGNEE(S): Kanebo, Limited, Japan
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001084948	A1	20011115	WO 2001-JP3827	20010508
W: AU, CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1281323	A1	20030205	EP 2001-926140	20010508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
AU 782727	B2	20050825	AU 2001-52689	20010508
US 2003144179	A1	20030731	US 2002-258420	20021022
PRIORITY APPLN. INFO.:			JP 2000-138373 A	20000511
			WO 2001-JP3827 W	20010508

AB Compns. containing peptide(s) and electrolyte excretion promoter(s) characterized by comprising a peptide or a peptide mixture, which is obtained by digesting casein with a protease such as trypsin and has angiotensin converting enzyme-inhibiting activity, and ≥1 electrolyte excretion promoters selected from chitosan, alginic acid, and salts thereof. Owing to the synergistic effects of the components, these compns. exert an excellent effect of inhibiting increase in blood pressure, and does not have bitterness taste and pungency associated with the peptides.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:480808 CAPLUS
DOCUMENT NUMBER: 135:106702
TITLE: Effects of chloride on stroke incidence and blood pressure in salt-sensitive hypertensive rats
AUTHOR(S): Katoh, Seiji
CORPORATE SOURCE: Second Dep. Med. Biochem., Sch. Med., Ehime Univ., Shigenobu-cho, Onsen-gun, Ehime, 791-0295, Japan
SOURCE: Nippon Eiyo, Shokuryo Gakkaishi (2001), 54(3), 147-153
CODEN: NESGDC; ISSN: 0287-3516
PUBLISHER: Nippon Eiyo, Shokuryo Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The effects of chloride on stroke incidence and blood pressure were examined in salt-sensitive hypertensive rats. Stroke-prone spontaneously hypertensive rats (SHRSP) and Dahl salt-sensitive (DahlS) rats were fed on a 3% NaCl diet with or without 5% chitosan or 5% alginate, which have potent inhibitory effects on intestinal absorption of chloride and sodium, resp. In SHRSP, the chitosan diet prevented stroke efficiently, whereas the alginate diet had no significant preventive effect. In DahlS rats, although the chitosan diet attenuated salt-accelerated hypertension, the alginate diet had no effect on blood pressure. In DahlS rats, 1 h of feeding on the high-salt diet increased the serum chloride concentration and stimulated the activity of angiotensin converting enzyme (ACE), whereas no changes were seen in the group given the high-salt diet with chitosan. These results suggest that chloride induces stroke and hypertension in salt-sensitive hypertensive rats, concomitant with stimulation of serum ACE activity.

L7 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:731496 CAPLUS
DOCUMENT NUMBER: 133:313629
TITLE: Chitosan soft capsules and their manufacture
INVENTOR(S): Sato, Toshio; Mizushima, Hiroshi; Kosaka, Yasuo
PATENT ASSIGNEE(S): LTT Inst. Co., Ltd., Japan; V-Tech Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000290187	A	20001017	JP 1999-98146	19990405
US 6190694	B1	20010220	US 1999-416183	19991011
CA 2291286	A1	20001005	CA 2000-2291286	19991129
PRIORITY APPLN. INFO.:			JP 1999-98146 A	19990405

AB The invention relates to a process for making soft capsules containing chitosan as a main ingredient, wherein the process includes powdering chitosan, mixing the chitosan powder with organic acid, organic acid salt, oil, and emulsifier to obtain a gel suspension, and encapsulating the gel suspension. Soft capsules were formulated from squid chitosan 207, glutamic acid 103.5, sodium glutamate 207, soybean oil, monoglyceride 155.25, beeswax 155.25 g, and tested for their solubility in artificial intestinal juice and blood pressure-lowering effect in hypertensive patients.

L7 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:514800 CAPLUS

DOCUMENT NUMBER: 122:255896
TITLE: Antihypertensive effect of chitosan in rats and humans
AUTHOR(S): Kato, Hideo; Taguchi, Tomoko; Okuda, Hiromichi; Kondo, Mari; Takara, Minoru
CORPORATE SOURCE: Department of Food and Nutrition, Hiroshima Women's College, Onsen, 791-02, Japan
SOURCE: Wakan Iyakugaku Zasshi (1994), 11(3), 198-205
CODEN: WIZAEL; ISSN: 1340-6302
PUBLISHER: Wakan Iyaku Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of dietary fibers on the hypertensive action of NaCl was examined by administration of a high salt diet containing alginic acid, which readily absorbs cations, or chitosan, which readily absorbs anions, to normotensive rats and SHRSP for 40 days. Addition of alginic acid to the high salt diet increased the amount of sodium and the addition of chitosan increased the amount of chloride in the feces of normotensive rats. Addition of chitosan to the high salt diet resulted in a significantly lower systolic blood pressure than addition of alginic acid in both groups. Serum ACE was significantly reduced in SHRSP fed with the high salt diet containing chitosan. Serum chloride ion was lower in the normotensive rats fed with the high salt diet containing chitosan than alginic acid. In humans, the high salt diet increased the systolic blood pressure and serum ACE activity and chloride concentration after 1 h. and oral administration of chitosan inhibited these increases. It also reduced the serum bicarbonate level after 1 h, but did not affect the sodium concentration Serum ACE in humans was found to be stimulated by chlorideion. These results suggest that chitosan prevents increase in the systolic blood pressure of humans induced by high salt intake by inhibiting intestinal absorption of chloride, an activator of ACE. Based on these results, the relationship between serum ACE and chloride concentration was discussed.

L7 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:400906 CAPLUS
DOCUMENT NUMBER: 121:906
TITLE: chitosan as antihypertensive
INVENTOR(S): Kato, Hideo; Okuda, Hiromichi
PATENT ASSIGNEE(S): Suisancho Chokan, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06056674	A	19940301	JP 1992-258422	19920928
JP 2507907	B2	19960619		
PRIORITY APPLN. INFO.:			JP 1992-147759 A1	19920608

AB Chitosan alone or added to feed or food promoted the chlorine excretion in feces and lowered the blood pressure in spontaneous hypertensive rats and male subjects given a high-salt diet.

L11 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:627293 CAPLUS
DOCUMENT NUMBER: 135:168161
TITLE: Chitosan succinate sodium salt production method
INVENTOR(S): Komarov, B. A.; Albulov, A. I.; Belov, M. Yu.; Samuylenko, A. Ya.; Fomenko, A. S.; Shinkarev, S. M.; Trunov, A. M.
PATENT ASSIGNEE(S): Vserossiiskii Nauchno-Issledovatel'skii i Tekhnologicheskii Institut Biologicheskoi Promyshlennosti, Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2144040	C1	20000110	RU 1998-106316	19980407

PRIORITY APPLN. INFO.: RU 1998-106316 19980407

AB Succinyl chitosan sodium salt is prepared by (1) preparing homogeneous chitosan solution, (2) separating chitosan by adding NaOH, (3) reacting the obtained chitosan suspension with succinic anhydride, (4) neutralizing the reaction mixture, and (5) separating the reaction product by drying. The method is characterized by the alkali treatment of chitosan until average pH reaches 6.9-7.5, chitosan is subsequently amorphized by exposing its aqueous suspension to cavitation or shearing, succinic anhydride is used in the form of powder with particle size no larger than 100 mcm, neutralization is carried out with alkali solution, and final product is isolated by spray or sublimation drying. This method is simple and does not involve environmentally unfriendly organic solvents.

L11 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:458758 CAPLUS
DOCUMENT NUMBER: 135:60476
TITLE: Food additives containing ascorbic acid chitosan complexes, their manufacture, and food containing them
INVENTOR(S): Hashimoto, Kunihiko; Onishi, Nobukazu
PATENT ASSIGNEE(S): Nishikawa Rubber Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001169750	A	20010626	JP 1999-376807	19991217
JP 3476130	B2	20031210		

PRIORITY APPLN. INFO.: JP 1999-376807 19991217

AB Food additives, which control lipid metabolism and stimulate immunity, are manufactured by (1) dissolving chitin-chitosan or chitosan with deacetylation degree ≥75% in 0.1-5% organic acid buffer at 0.05-3%, (2) adjusting the solution at pH 5.0-7.5 upon addition of aqueous alkaline solns., (3) adding ≥1 compound selected from ascorbic acid, ascorbic acid, 2-O-phosphate, ascorbic acid 2-O-glucoside, and their salts , preferably their dried products, to the solution at 3-6 mol per 1 kg (dry weight) chitosans, and then (4) pulverizing the solution

by freeze-drying and/or spray-drying at a lower temperature Foods manufactured by adding the additives to powder or dissolving them to liqs. are also claimed. Chitosan with deacetylation degree 85% was dissolved in an aqueous solution of glutamic acid and the solution was treated with NaOH solution to adjust pH at 6.0. One of the above ascorbic acids was added to the solution and the mixture was freeze-dried to give powder. Hypocholesteremic effect of the powder was shown in hyperlipemic patients. The powder also increased IgG1 and IgG2 in Japanese black calves and Holstein calves.

L11 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:19335 CAPLUS
DOCUMENT NUMBER: 132:65671
TITLE: Manufacture of quaternary ammonium salts of chitosan
INVENTOR(S): Tanaka, Yoshiaki; Okuno, Hiroshi; Tsutsui, Kiyoko
PATENT ASSIGNEE(S): Lignite Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000001504	A	20000107	JP 1998-169826	19980617
PRIORITY APPLN. INFO.:			JP 1998-169826	19980617

AB The salts are manufactured by quaternizing a chitosan compound in a solvent using alkyl iodide to partially convert the amino group of chitosan to trialkylated iodide salts, deionizing the reaction with ion-exchange resin, exchanging the I ions with Br or Cl ions and spray drying.

L11 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:132794 CAPLUS
DOCUMENT NUMBER: 128:235074
TITLE: Design of microencapsulated chitosan microspheres for colonic drug delivery
AUTHOR(S): Lorenzo-Lamosa, M. L.; Remunan-Lopez, C.; Vila-Jato, J. L.; Alonso, M. J.
CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutical Technology, University of Santiago de Compostela, Santiago de Compostela, 15706, Spain
SOURCE: Journal of Controlled Release (1998), 52(1,2), 109-118
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Among the different approaches to achieve colon-selective drug delivery, the use of polymers, specifically biodegraded by colonic bacteria, holds great promise. In this work a new system which combines specific biodegradability and pH-dependent release is presented. The system consists of chitosan (CS) microcores entrapped within acrylic microspheres. Sodium diclofenac (SD), used as a model drug, was efficiently entrapped within CS microcores using spray-drying and then microencapsulated into Eudragit L-100 and Eudragit S-100 using an oil-in-oil solvent evaporation method. The size of the CS microcores was small (1.8-2.9 μm) and they were efficiently encapsulated within Eudragit microspheres (size between 152 and 223 μm) forming a multireservoir system. Even though CS dissolves very fast in acidic media, at pH 7.4, SD release from CS microcores was delayed, the release rate being adjustable (50 dissolved within 30-120 min) by changing

the CS mol. weight (MW) or the type of CS salt. Furthermore, by coating the CS microcores with Eudragit, perfect pH-dependent release profiles were attained. No release was observed at acidic pHs, however, when reaching the Eudragit pH solubility, a continuous release for a variable time (8-12 h) was achieved. A combined mechanism of release is proposed, which considers the dissoln. of the Eudragit coating, the swelling of the CS microcores and the dissoln. of SD and its further diffusion through the CS gel cores. In addition, IR (IR) spectra revealed that there was an ionic interaction between the amine groups of CS and the carboxyl groups of Eudragit, which provided the system with a new element for controlling the release. In conclusion, this work presents new approaches for the modification of CS as well as a new system with a great potential for colonic drug delivery.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:20052 CAPLUS
DOCUMENT NUMBER: 116:20052
TITLE: Whipping cream substitute powders containing chitosan and their manufacture
INVENTOR(S): Ootani, Makoto; Tatsumi, Kyoshi
PATENT ASSIGNEE(S): Snow Brand Milk Products Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03210147	A	19910913	JP 1990-5986	19900112
PRIORITY APPLN. INFO.:			JP 1990-5986	19900112

AB Whipping cream substitute powders are manufactured by emulsifying oil and aq phases, mixing with chitosan solns., homogenizing, sterilizing, concentrating, and drying. The powders are whipped with H2O and the whipped cream substitutes show good shape retention, mild taste and melt smoothly in the mouth. An oil phase of hydrogenated coconut oil, hydrogenated palm kernel oil, and emulsifiers were mixed with aqueous phase containing acid casein, Ca(OH)2, phosphate salts, sucrose, powdered starch sugar, whey, and guar gum and homogenized with an aqueous solution containing chitosan and lactic acid, sterilized, and spray-dried to manufacture a powder.

L11 ANSWER 14 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2006142181 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16314079
TITLE: Preparation and release of salbutamol from chitosan and chitosan co-spray dried compacts and multiparticulates.
AUTHOR: Corrigan Deirdre O; Healy Anne Marie; Corrigan Owen I
CORPORATE SOURCE: School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin, Ireland.
SOURCE: European journal of pharmaceutics and biopharmaceutics : official journal of Arbeitsgemeinschaft fur Pharmazeutische Verfahrenstechnik e.V, (2006 Apr) Vol. 62, No. 3, pp. 295-305. Electronic Publication: 2005-11-28.
Journal code: 9109778. ISSN: 0939-6411.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200605

ENTRY DATE: Entered STN: 14 Mar 2006
Last Updated on STN: 31 May 2006
Entered Medline: 30 May 2006

AB Chitosan microparticulates were prepared by spray drying from aqueous media containing hydrochloric acid or acetic acid. The medium affected the morphology and degree of acetylation of chitosan, the presence of acetic acid resulting in increased acetylation of the polymer during processing. Co-spray drying salbutamol sulphate/chitosan systems with the crosslinking agent formaldehyde had no detectable effect on particle morphology. However, with increasing salbutamol loading particles became less spherical, taking on a collapsed appearance. Spray dried chitosan-salbutamol sulphate microparticulates were X-ray amorphous. Chitosan-salbutamol sulphate composites were compressed into discs to quantify drug release and showed delayed release of salbutamol sulphate. The general power law equation fitted the data better than the t0.5, mono- or bi-exponential models and gave n indices greater than 0.5, i.e. in the range 0.53-0.71. Crosslinking did not dramatically alter the drug release behaviour. Both crosslinked and non-crosslinked composites swelled during release, the former to the greater extent. The release data for crosslinked composites gave slightly higher n values than the corresponding non-crosslinked composites, consistent with the increased swelling of these systems. Release studies were also conducted on the microparticulates. Because of the small particle size and large surface area present, the release of the highly soluble drug salt was extremely rapid (> 90% release in 5 min). Twin impinger analysis indicated good in vitro deposition of the microparticulates and potential for pulmonary delivery.

L11 ANSWER 15 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L11 ANSWER 16 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2003477091 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14553988

TITLE: Alkaline chitosan solutions.
AUTHOR: Muzzarelli Corrado; Tosi Giorgio; Francescangeli Oriano; Muzzarelli Riccardo A A
CORPORATE SOURCE: Institute of Biochemistry, Faculty of Medicine, Polytechnic University of Marche, Via Ranieri 67, IT-60100 Ancona, Italy.
SOURCE: Carbohydrate research, (2003 Oct 10) Vol. 338, No. 21, pp. 2247-55.
Journal code: 0043535. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200407
ENTRY DATE: Entered STN: 15 Oct 2003
Last Updated on STN: 29 Jul 2004
Entered Medline: 28 Jul 2004

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solutions into saturated ammonium hydrogen carbonate. Incubation at 20 degrees C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO(2)(-)NH(4)(+) a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, molecular sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solutions at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 degrees C). Citrate could cross-link chitosan and impart insolubility to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH(4)HCO(3) treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solutions of mixed chitosan carbamate and alginate were spray-dried at 115 degrees C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 micron.

L11 ANSWER 17 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2003320948 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12851047
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Petrachi M; Orienti I; Zecchi V
CORPORATE SOURCE: University of Bologna, Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: Journal of microencapsulation, (2003 Jul-Aug) Vol. 20, No. 4, pp. 473-8.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200311
ENTRY DATE: Entered STN: 10 Jul 2003
Last Updated on STN: 18 Dec 2003
Entered Medline: 26 Nov 2003

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride

delivery. Chitosan aspartate (CH-Asp), chitosan glutamate (CH-Glu) and chitosan hydrochloride (CH-HCl) were prepared by freeze-drying and coated with stearic, palmitic, myristic and lauric acids by spray-drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.

L11 ANSWER 18 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2002257824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11996810
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery.
AUTHOR: Orienti I; Cerchiara T; Luppi B; Bigucci F; Zuccari G; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Via S. Donato 19/2, 40127, Bologna, Italy.. orienti@biocfarm.unibo.it
SOURCE: International journal of pharmaceutics, (2002 May 15) Vol. 238, No. 1-2, pp. 51-9.
Journal code: 7804127. ISSN: 0378-5173.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 9 May 2002
Last Updated on STN: 28 Jun 2002
Entered Medline: 27 Jun 2002

AB Chitosan (CH) was dissolved in aqueous solutions containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solutions by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behaviour of SD from the physical mixture during gastrointestinal transit. The physical mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with beta-glucosidase at pH 7.0 enhanced the release rate. Among the CH salts used, glutamic and aspartic salts provided the best control of release.

L11 ANSWER 19 OF 19 MEDLINE on STN
ACCESSION NUMBER: 1998350558 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9685941
TITLE: Design of microencapsulated chitosan microspheres for colonic drug delivery.
AUTHOR: Lorenzo-Lamosa M L; Remunan-Lopez C; Vila-Jato J L; Alonso M J
CORPORATE SOURCE: Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Santiago de Compostela, Spain.
SOURCE: Journal of controlled release : official journal of the Controlled Release Society, (1998 Mar 2) Vol. 52, No. 1-2, pp. 109-18.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199808

ENTRY DATE: Entered STN: 20 Aug 1998
Last Updated on STN: 20 Aug 1998
Entered Medline: 13 Aug 1998

AB Among the different approaches to achieve colon-selective drug delivery, the use of polymers, specifically biodegraded by colonic bacteria, holds great promise. In this work a new system which combines specific biodegradability and pH-dependent release is presented. The system consists of chitosan (CS) microcores entrapped within acrylic microspheres. Sodium diclofenac (SD), used as a model drug, was efficiently entrapped within CS microcores using spray-drying and then microencapsulated into Eudragit L-100 and Eudragit S-100 using an oil-in-oil solvent evaporation method. The size of the CS microcores was small (1.8-2.9 microns) and they were encapsulated within Eudragit microspheres (size between 152 and 233 microns) forming a multireservoir system. Even though CS dissolves very fast in acidic media, at pH 7.4, SD release from CS microcores was delayed, the release rate being adjustable (50% dissolved within 30-120 min) by changing the CS molecular weight (MW) or the type of CS salt. Furthermore, by coating the CS microcores with Eudragit, perfect pH-dependent release profiles were attained. No release was observed at acidic pHs, however, when reaching the Eudragit pH solubility, a continuous release for a variable time (8-12 h) was achieved. A combined mechanism of release is proposed, which considers the dissolution of the Eudragit coating, the swelling of the CS microcores and the dissolution of SD and its further diffusion through the CS gel cores. In addition, infrared (IR) spectra revealed that there was an ionic interaction between the amine groups of CS and the carboxyl groups of Eudragit, which provided the system with a new element for controlling the release. In conclusion, this work presents new approaches for the modification of CS as well as a new system with a great potential for colonic drug delivery.

L11 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:224292 CAPLUS
DOCUMENT NUMBER: 145:195416
TITLE: Preparation and release of salbutamol from chitosan and chitosan co-spray dried compacts and multiparticulates
AUTHOR(S): Corrigan, Deirdre O.; Healy, Anne Marie; Corrigan, Owen I.
CORPORATE SOURCE: School of Pharmacy and Pharmaceutical Sciences, Trinity College, University of Dublin, Dublin, Ire.
SOURCE: European Journal of Pharmaceutics and Biopharmaceutics (2006), 62(3), 295-305
CODEN: EJPBEL; ISSN: 0939-6411
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan microparticulates were prepared by spray drying from aqueous media containing hydrochloric acid or acetic acid. The medium affected the morphol. and degree of acetylation of chitosan, the presence of acetic acid resulting in increased acetylation of the polymer during processing. Co-spray drying salbutamol sulfate/chitosan systems with the crosslinking agent formaldehyde had no detectable effect on particle morphol. However, with increasing salbutamol loading particles became less spherical, taking on a collapsed appearance. Spray dried chitosan-salbutamol sulfate microparticulates were X-ray amorphous. Chitosan-salbutamol sulfate composites were compressed into disks to quantify drug release and showed delayed release of salbutamol sulfate. The general power law equation fitted the data better than the t 0.5, mono- or bi-exponential models and gave n indexes greater than 0.5, i.e. in the range 0.53-0.71. Crosslinking did not dramatically alter the drug release behavior. Both crosslinked and non-crosslinked composites swelled during release, the former to the greater extent. The release data for crosslinked composites gave slightly higher n values than the corresponding non-crosslinked composites, consistent with the increased swelling of these systems. Release studies were also conducted on the microparticulates. Because of the small particle size and large surface area present, the release of the highly soluble drug salt was extremely rapid (>90% release in 5 min). Twin impinger anal. indicated good in vitro deposition of the microparticulates and potential for pulmonary delivery.
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1138507 CAPLUS
TITLE: Manufacturing method of dried corvina using medical plant
INVENTOR(S): Kim, Sung Ho
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003044157	A	20030609	KR 2001-74805	20011129
PRIORITY APPLN. INFO.:			KR 2001-74805	20011129

AB PURPOSE: Provided is a manufacturing method of a dried corvina by using a medical plant and sun-dried salt removed from poisonous

substances, thereby increasing human health. CONSTITUTION: A manufacturing method of a dried corvina using a medical plant comprises the steps of: removing poisonous substances from sun-dried salt using reeds, and charcoal or silver; adding Laminaria salt and bamboo salt to the sun-dried salt; dipping medicinal plants in charcoal solution, pyroligneous solution, or reed root solution for 2 hours to remove poisonous substances, followed by washing and dewatering them; pulverizing or extracting the medicinal plants and adding the salt prepared above, Cordyceps militaris powder or chitosan powder thereto; spraying the mixture thereof to a corvina and leaving it for several days; washing the corvina with charcoal solution then drying it.

L11 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L11 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:566810 CAPLUS
DOCUMENT NUMBER: 140:64869
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Petrachi, M.; Orienti, I.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: Journal of Microencapsulation (2003), 20(4), 473-478
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by freeze drying and coated with stearic, palmitic, myristic and lauric acids by spray -drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts

on the release behavior of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:343408 CAPLUS
DOCUMENT NUMBER: 136:324481
TITLE: Manufacture of herb salt from herbs cultured using chitosan spray
INVENTOR(S): Omoto, Fujiko
PATENT ASSIGNEE(S): Apio Club K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002125616	A	20020508	JP 2000-328479	20001027
PRIORITY APPLN. INFO.:			JP 2000-328479	20001027

AB Herb salt is manufactured by cultivating herbs while spraying aqueous chitosan solution to leaves, cropping fruits, leaves, and stems, shade- or sun-drying them, cutting them, and mixing them with NaCl. Spraying rosemary with chitosan solution reduced nitrate concentration and increased Brix.

L11 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:999284 CAPLUS
DOCUMENT NUMBER: 142:279143
TITLE: Process for producing salted fish with seaweeds powder, mugwort extract, green tea extract and chitosan solution
INVENTOR(S): Kim, Deuk Gi
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003094199	A	20031211	KR 2003-83704	20031124
PRIORITY APPLN. INFO.:			KR 2003-83704	20031124

AB A process for producing a salted fish with seaweeds powder, a mugwort extract, a green tea extract and a chitosan solution is provided, thereby preventing adult diseases, removing fishy smell, and preserving freshness of the fish for a long time. The process comprises the steps of: washing and removing internal organs of fish; spraying salts on the fish; spraying seaweeds powder on the surface of the fish; maturing the salted and seaweeds powder sprayed fish; and packaging the matured fish under vacuum condition, wherein the seaweeds include tangleweed, brown seaweed and brown algae; the matured fish may be further dipped in mugwort or green tea extract; the matured fish may be further coated with a chitosan solution

L20 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006
PRIORITY APPLN. INFO.:			KR 2000-60499	20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α- chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α- chitosan is obtained from shells of crab and shrimp and β- chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a

chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L20 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:658743 CAPLUS
DOCUMENT NUMBER: 137:190771
TITLE: Chitosan-containing solution for prophylactic treatment of teats of lactating animals
INVENTOR(S): Hellman, Asa; Mathisen, Torbjorn
PATENT ASSIGNEE(S): Swed.
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119949	A1	20020829	US 2001-791739	20010226
CA 2439465	A1	20020906	CA 2002-2439465	20020225
WO 2002067952	A1	20020906	WO 2002-SE318	20020225
WO 2002067952	A8	20040521		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1372672	A1	20040102	EP 2002-700937	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007531	A	20040309	BR 2002-7531	20020225
JP 2005508835	T	20050407	JP 2002-567318	20020225
PRIORITY APPLN. INFO.:			US 2001-791739 A	20010226
			WO 2002-SE318 W	20020225

AB An aqueous solution for prophylactic treatment of teats of lactating cows comprises as a first component at least partially deacetylated chitosan or its acid addition salt in a concentration of up to about 2% by weight of chitosan. A pH solution of the solution is adjusted to about 4-6.8 by the addition of a mineral or organic acid. The first component has a mol. weight such that the viscosity of the solution is < 50 mPas. The aqueous solution further comprises a second component selected from heparin, heparan sulfate, and dextran sulfate, the weight ratio between the first and second components being from about 10:1 to about 100:1. For example, 5.8 g 87% glycerol was added to 95 mL of water and 0.3 mL acetic acid (99.9%) was added to the glycerol solution under stirring until a homogeneous solution was obtained. To the solution prepared was then added 1.0 g chitosan (MW of about 80 kD, deacetylation degree 94% (Primex)) and stirring was maintained until all chitosan has been dissolved. The pH of this solution was about 5.2. The solution showed improved stability and resulted in a viscosity lying within the preferred range and enabling easy handling in connection with the application to the teats.

L20 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:716545 CAPLUS
DOCUMENT NUMBER: 135:222846
TITLE: Salt- and drought-resistant agent for plant and its application
INVENTOR(S): Zhao, Kefu; Cao, Ziyi; Song, Jie; Zhang, Hui; Zhao, Yanxiu
PATENT ASSIGNEE(S): Shandong Normal University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1290483	A	20010411	CN 1999-112463	19990930
PRIORITY APPLN. INFO.:			CN 1999-112463	19990930

AB The title agent contains gibberellin compds. from one or more of GA3, GA7, GA4 and their K or Na salts, salicylic acid derivs. from one or more of Na salicylate, K salicylate, Ca salicylate, Me salicylate, Et salicylate and Pr salicylate, amino oligosaccharide (O-carboxymethyl chitosan), and calcium salt from one or more of CaCl2, Ca(NO3)2, Ca(Ac)2, Ca propionate, Ca butyrate, Ca valerate, Ca citrate, etc. Vitamins, amino acids, plant growth regulators, organic acid, mineral substance, surfactant, polysaccharides can be added to the agent. The agent is suitable for the crops growing in salty soil, and used to immerse seeds, spray seedlings or mix with seeds. The agent is drought-resistant and salt-resistant.

L20 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:7489 CAPLUS
DOCUMENT NUMBER: 134:71036
TITLE: Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6167652	B1	20010102	US 1999-237065	19990126
PRIORITY APPLN. INFO.:			US 1997-787870 B2	19970123
			US 1998-13945 B2	19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025734	A1	20000511	WO 1999-EP8105	19991027
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19850734	A1	20000511	DE 1998-19850734	19981104
EP 1131040	A1	20010912	EP 1999-971303	19991027
EP 1131040	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ES 2235551	T3	20050701	ES 1999-971303	19991027

PRIORITY APPLN. INFO.: DE 1998-19850734 A 19981104
WO 1999-EP8105 W 19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:519876 CAPLUS
DOCUMENT NUMBER: 129:132548
TITLE: Chitosan salts as crop yield enhancers.
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832335	A1	19980730	WO 1998-US1331	19980122
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2278301	A1	19980730	CA 1998-2278301	19980122
AU 9862484	A	19980818	AU 1998-62484	19980122
EP 964616	A1	19991222	EP 1998-904665	19980122
EP 964616	B1	20030102		
R: DE, ES, FR, GB, IT, NL, PT, IE				

BR 9806926	A	20000502	BR 1998-6926		19980122
JP 2001507361	T	20010605	JP 1998-532152		19980122
ES 2189133	T3	20030701	ES 1998-904665		19980122
MX 9906833	A	20000531	MX 1999-6833		19990722
PRIORITY APPLN. INFO.:			US 1997-787870	A	19970123
			WO 1998-US1331	W	19980122

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties have an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5 weight% chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 8907395	A1	19890824	WO 1989-US429		19890207
W: AU, BR, DK, FI, JP, NO, SU					
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE					
AU 8931926	A	19890906	AU 1989-31926		19890207
ZA 8901214	A	19891129	ZA 1989-1214		19890216
PRIORITY APPLN. INFO.:			US 1988-158227	A	19880219
			US 1988-251693	A	19880927
			WO 1989-US429	A	19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L20 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313

PRIORITY APPLN. INFO.: JP 1987-59229 19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L20 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:572265 CAPLUS

DOCUMENT NUMBER: 87:172265

TITLE: Studies on the utilization of crab shell waste - chitosan as a coagulating agent

AUTHOR(S): Fujita, Takao; Yamauchi, Takafumi; Yanagisawa, Ikuko; Hiroi, Osamu

CORPORATE SOURCE: Cent. Res. Lab., Nippon Suisan Co., Ltd., Tokyo, Japan

SOURCE: Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku (1976), 11, 49-55
CODEN: NSKHA2; ISSN: 0369-5735

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB HCHO was sprayed on powdered chitin prepared from king crab shell to obtain chitosan salt containing H2O 10 and HCHO 18%, which was used for coagulation of clay suspension, wastewater from processing of ground fish meat, and activated sludge. In the coagulation test of clay suspension with 0.1-20 ppm chitosan, the coagulation and settling of clay particles were accelerated with increasing chitosan salt. The chitosan salt also had good coagulation effect for wastewater from ground fish meat processing and activated sludge.

L26 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006
PRIORITY APPLN. INFO.:			KR 2000-60499	20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α-chitosan is obtained from shells of crab and shrimp and β-chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L31 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:846323 CAPLUS
DOCUMENT NUMBER: 142:24852
TITLE: Chitosan containing composition for reducing toxicity of anticancer agent
INVENTOR(S): Chon, Dong Won; Sung, Yong Kil
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korea, No pp. given
CODEN: KRXXFC
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 173726	B1	19990201	KR 1995-30567	19950919

PRIORITY APPLN. INFO.: KR 1995-30567 19950919

AB A pharmaceutical composition containing aqueous chitosan as an active component for reducing toxicity of an anticancer drug and improving anticancer effect is provided which can be effectively used as a safener to an anticancer drug. A composition containing aqueous chitosan having a mol. weight 900-25,000 is used as a safener to an anticancer drug in which 0.02-1 g anticancer drug is applied to 1 g aqueous chitosan. The anticancer drug is at least one selected from actinomycin D, acralvicine, cyclocytidine, busulfan, chromomycin A3, cisplatin, cytosine arabinoside, daunomycin, 5-FU, L-asparaginase, 6-mercaptopurine, riboside, OK-432, PSK, UFT, vincristine, and vindesine.

L31 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:512437 CAPLUS
DOCUMENT NUMBER: 141:55857
TITLE: Manufacture of chitosan-containing composite emulsions with improved volume efficiency and storage stability, their compositions, and articles coated with them
INVENTOR(S): Urakami, Tadashi; Waki, Atsushi; Inui, Kuniaki; Matoba, Yasuhiro; Taichi, Ikuo; Imashiro, Hideki; Irie, Yasuhiro
PATENT ASSIGNEE(S): Kowa Chemical Industries Co., Ltd., Japan; Chuo Rika Kogyo Corporation
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004175876	A	20040624	JP 2002-342283	20021126
JP 3789887	B2	20060628		

PRIORITY APPLN. INFO.: JP 2002-342283 20021126

AB The method contains polymerizing radically polymerizable monomers in the presence of chitosan (derivs.) by adding emulsions of them to reaction system successively or intermittently. Thus, dropping a prepolymd. emulsion containing Adeka Reasoap ER 20 (nonionic reactive emulsifier) 77.3, Adeka Reasoap ER 30 (nonionic reactive emulsifier) 5, Me methacrylate 90, cyclohexyl methacrylate 60, 2-ethylhexyl acrylate 92, C 60M (chitosan) 8, adipic acid 6 parts to a reactor at 60° for 2 h, aging it at 70° for 2 h, and applying it to a plaster board gave a coating

showing good dryability, alkali resistance, and deodorant properties.

L31 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:757430 CAPLUS
DOCUMENT NUMBER: 139:256713
TITLE: Chitosan-containing composition for improving disease resistance and growth of plants
INVENTOR(S): Sakurai, Haseo; Fukuya, Hiroki; Anzai, Fukumi
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077654	A1	20030925	WO 2003-JP3472	20030320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003217484	A1	20030929	AU 2003-217484	20030320
JP 2003342105	A	20031203	JP 2003-77850	20030320
JP 3781733	B2	20060531		
EP 1484968	A1	20041215	EP 2003-712813	20030320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1642419	A	20050720	CN 2003-806395	20030320
US 2005239657	A1	20051027	US 2005-508213	20050609

PRIORITY APPLN. INFO.:		
JP 2002-77965	A	20020320
US 2002-367214P	P	20020326
WO 2003-JP3472	W	20030320

AB A composition for improving disease resistance and growth of plants comprises (A) a chitosan having a mol. weight of 3,000 to 60,000, (B) a chitosan having a mol. weight of 35,000 to 90,000 (provided that the mol. weight of chitosan (A) and the mol. weight of chitosan (B) are different) and (C) a lactic acid and/or a succinic acid. By using the composition of the present invention wherein two kinds of chitosans having different mol. wts., an effect of enhancing stable and high disease resistance and improving growth can be exerted on plants.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:764027 CAPLUS
DOCUMENT NUMBER: 130:48702
TITLE: Chitosan-containing compositions for improving plant disease resistance
INVENTOR(S): Vasiljevich, Novozhilov kapiton; Leonidovich, Tjuterev Stanislav; Aleksandrovich, Tarlakovskij Stanislav; Sergeevich, Jaubchik Mikhail; Filippovich, Kolomiets Aleksej; Fedorovich, Panarin Evgenij; Jakovlevich, Ismailov Eduard; Ismailovich, Gamza-Zade Arif;

Jakovlevich, Ismailov Vladimir; Ivanovich, Begunov Ivan
PATENT ASSIGNEE(S): Iskra Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10309129	A	19981124	JP 1997-282316	19971015
JP 3356973	B2	20021216		
RU 2127056	C1	19990310	RU 1997-101133	19970123
RU 2158510	C2	20001110	RU 1997-107927	19970515
PRIORITY APPLN. INFO.:			RU 1997-101133 A	19970123
			RU 1997-107927 A	19970527

AB Compns. for enhancing resistance to plant diseases comprise chitosan; lactic acid and/or succinic acid, optionally mixed with glutamic acid or its salts; and 1-3 kinds of biol. active materials selected from phytohormones, unsatd. fatty acids or derivs., alkyldimethylbenzylammonium salts of crotonic acid-vinylpyrrolidone copolymer, phenolic acids, and inorg. salts; and water. Thus, seed treatment with an aqueous solution containing chitosan 0.5 and succinic acid 0.5% by weight was effective for controlling Helminthosporium sativum in wheat.

L31 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:576618 CAPLUS
DOCUMENT NUMBER: 129:217686
TITLE: Biodegradable and transparent chitosan-containing compositions and their manufacture
INVENTOR(S): Sumida, Hiroshi; Yoshimoto, Katsuhiko; Yoshimura, Osamu; Ueda, Kazumasa
PATENT ASSIGNEE(S): Negami Kogyo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10231382	A	19980902	JP 1997-36725	19970220
JP 3799117	B2	20060719		
PRIORITY APPLN. INFO.:			JP 1997-36725	19970220

AB The compns., useful for foams and films in packaging and agriculture (no data), are manufactured by drying and curing an aqueous mixts. of chitosan, poly(vinyl alc.), and compds. containing ≥2 amino- and/or OH-reactive groups. Thus, a composition containing 20 parts 10% SK 10 AcOH aqueous solution (chitosan), 80 parts 10% Gohsenol GH 20 aqueous solution (PVA), 0.8 part M 3 (crosslinking agent), and 1 part glycerin was cast on a polyester film and dried at 90-130° for 1 h to give a 30 μm-thick transparent film showing tensile strength 6.9 kg/mm2, elongation 69%, good water resistance., biodegradability, and antibacterial properties.

L36 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 4 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004
AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L39 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:847502 CAPLUS
DOCUMENT NUMBER: 142:112921
TITLE: Extension of shelf life of white rice cake and uncooked noodle using chitosan
INVENTOR(S): Im, Jong Hwan; Lee, Jang Wook
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2000030496	A	20000605	KR 2000-10804	20000225
PRIORITY APPLN. INFO.:			KR 2000-10804	20000225

AB Extension of shelf life and prevention of deterioration due to microorganisms in white rice cake and uncooked noodle are provided by using chitosan and lactic acid and which is substitute for alc. White rice cake is soaked or sprayed with the solution of chitosan with lactic acid before packaging. For uncooked noodles, solution of chitosan and lactic acid is added to water for kneading dough or finished noodle is soaked or sprayed with the chitosan solution Thus, the method does not raise the production cost and can increase the effect 2 times compared to the method using alc.

L39 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:172909 CAPLUS
DOCUMENT NUMBER: 138:210388
TITLE: Chitosan-coated web and process for making the same
INVENTOR(S): Tamburro, Maurizio; D'Alesio, Nicola; Pesce, Antonella; Di Cintio, Achille; Carlucci, Giovanni; Tordone, Adelia
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1287835	A1	20030305	EP 2001-120342	20010824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1287836	A2	20030305	EP 2002-18012	20020812
EP 1287836	A3	20030716		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
EP 1287837	A2	20030305	EP 2002-18013	20020812
EP 1287837	A3	20030716		
EP 1287837	B1	20060510		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
AT 325626	T	20060615	AT 2002-18013	20020812
WO 2003018073	A2	20030306	WO 2002-US26998	20020823
WO 2003018073	A3	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003018074	A2	20030306	WO 2002-US26999	20020823
WO 2003018074	A3	20031113		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002327522	A1	20030310	AU 2002-327522	20020823
EP 1418953	A2	20040519	EP 2002-763516	20020823

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

EP 1425049	A2	20040609	EP 2002-766091	20020823

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

BR 2002012094	A	20040803	BR 2002-12094	20020823
BR 2002012095	A	20040803	BR 2002-12095	20020823
JP 2005519653	T	20050707	JP 2003-522589	20020823
JP 2005524416	T	20050818	JP 2003-522588	20020823
US 2004166307	A1	20040826	US 2004-785277	20040224
US 2004167487	A1	20040826	US 2004-785464	20040224

PRIORITY APPLN. INFO.:	EP 2001-120342	A	20010824
	EP 2002-18012	A	20020812
	EP 2002-18013	A	20020812
	WO 2002-US26998	W	20020823
	WO 2002-US26999	W	20020823

AB The present invention relates to a particulate chitosan coated web for use in disposable absorbent articles and a process for making the same. The chitosan particles have a mean diameter of not more than 300 μ. The process involves the step applying onto the surface of a precursor web a solution or a dispersion comprising chitosan material in the form of a spray of droplets having a mean diameter of less than 1500 μ.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2001:7489 CAPLUS
DOCUMENT NUMBER:	134:71036
TITLE:	Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S):	Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S):	DCV, Inc., USA
SOURCE:	U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned. CODEN: USXXAM
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6167652	B1	20010102	US 1999-237065	19990126

PRIORITY APPLN. INFO.: US 1997-787870 B2 19970123
US 1998-13945 B2 19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025734	A1	20000511	WO 1999-EP8105	19991027
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19850734	A1	20000511	DE 1998-19850734	19981104
EP 1131040	A1	20010912	EP 1999-971303	19991027
EP 1131040	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
ES 2235551	T3	20050701	ES 1999-971303	19991027

PRIORITY APPLN. INFO.: DE 1998-19850734 A 19981104
WO 1999-EP8105 W 19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:15226 CAPLUS
DOCUMENT NUMBER: 130:43108
TITLE: Cosmetic compositions containing a cationic polymer and an active molecule contained in at least a micro or nanoparticulate vector for treating living or inert surfaces
INVENTOR(S): Derrieu, Guy; Pougnas, Jean Luc; Piat, Jean Philippe Robert Charles; Monginoux, Patricia Anne Laure; Karst, Christian
PATENT ASSIGNEE(S): Virbac S. A., Fr.
SOURCE: Fr. Demande, 18 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2761886	A1	19981016	FR 1997-4549	19970414
FR 2761886	B1	20000505		
US 6500446	B1	20021231	US 1998-59200	19980414
PRIORITY APPLN. INFO.:			FR 1997-4549 A	19970414

AB The title compns. are disclosed. A hair lotion contained octyl stearate 8.00, Emulgade SE 6.00, Novasomes 10.00, glycerin 5.00, decyl oleate 4.00, cetearyl alc. 1.50, chitosan glycolate 0.15, phenylethyl alc. 0.20, and water q.s. 69.15%.

L39 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:771319 CAPLUS
DOCUMENT NUMBER: 130:29226
TITLE: Use of sugar derivatives against adhesion of protozoa and parasites
INVENTOR(S): Wolf, Florian; Schreiber, Joerg; Maurer, Peter; Buenger, Joachim
PATENT ASSIGNEE(S): Beiersdorf A.-G., Germany
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19721411	A1	19981126	DE 1997-19721411	19970522
PRIORITY APPLN. INFO.:			DE 1997-19721411	19970522

AB Adhesion of pathogenic protozoa and parasites to the skin or organ surfaces is inhibited by topical, oral, or parenteral administration of compns. containing antiadhesive carbohydrates or carbohydrate derivs. such as esters with fatty acids. Thus, a water-in-oil lotion contained paraffin oil 25.00, silicone oil 2.00, ceresin 1.50, lanolin alc. 0.50, glucose sesquiisostearate 2.50, cetearyl glucoside 1.00, perfume, preservative, and H2O to 100.00 weight%.

L39 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:621724 CAPLUS
DOCUMENT NUMBER: 123:17449
TITLE: Hair preparations containing linear polysiloxane-polyoxyalkylene block copolymers and cationic polymers
INVENTOR(S): Dupuis, Christine
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 19 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2709954	A1	19950324	FR 1993-10967	19930915
FR 2709954	B1	19951020		
PRIORITY APPLN. INFO.:			FR 1993-10967	19930915

AB The title hair prepns. which have good fixating ability are disclosed. A hair lotion contained Jaguar C 13S 1, a linear polysiloxane-polyoxyalkylene block copolymer 1, EtOH 8.6, perfumes and preservatives q.s., and water q.s. 100g.

L39 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8907395	A1	19890824	WO 1989-US429	19890207
W: AU, BR, DK, FI, JP, NO, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8931926	A	19890906	AU 1989-31926	19890207
ZA 8901214	A	19891129	ZA 1989-1214	19890216
PRIORITY APPLN. INFO.:			US 1988-158227 A	19880219
			US 1988-251693 A	19880927
			WO 1989-US429 A	19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L41 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227
US 2005232999	A1	20051020	US 2004-518419	20041217

PRIORITY APPLN. INFO.: KR 2003-31616 A 20030519
WO 2004-KR410 W 20040227

AB The present invention relates to a method for producing a chitosan-bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:185865 CAPLUS
DOCUMENT NUMBER: 112:185865
TITLE: Polyurethane sheet containing chitosan salts for treatment of decubitus ulcer
INVENTOR(S): Morita, Isamu; Sugimoto, Tadayuki
PATENT ASSIGNEE(S): Daiichi Kogyo Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 01207238	A	19890821	JP 1988-33552	19880215
PRIORITY APPLN. INFO.:			JP 1988-33552	19880215

AB A sheet for treatment of decubitus ulcer consists of a polyurethane foam sheet containing chitosan salt particles. Thus, a cream was prepared using polyurethane 390 and chitosan lactate 4.5 parts by weight with foam-producing agents and a thickener, and spread over a nonwoven sheet of polyester.

L42 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:716545 CAPLUS
DOCUMENT NUMBER: 135:222846
TITLE: Salt- and drought-resistant agent for plant and its application
INVENTOR(S): Zhao, Kefu; Cao, Ziyi; Song, Jie; Zhang, Hui; Zhao, Yanxiu
PATENT ASSIGNEE(S): Shandong Normal University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1290483	A	20010411	CN 1999-112463	19990930
PRIORITY APPLN. INFO.:			CN 1999-112463	19990930

AB The title agent contains gibberellin compds. from one or more of GA3, GA7, GA4 and their K or Na salts, salicylic acid derivs. from one or more of Na salicylate, K salicylate, Ca salicylate, Me salicylate, Et salicylate and Pr salicylate, amino oligosaccharide (O-carboxymethyl chitosan), and calcium salt from one or more of CaCl2, Ca(NO3)2, Ca(Ac)2, Ca propionate, Ca butyrate, Ca valerate, Ca citrate, etc. Vitamins, amino acids, plant growth regulators, organic acid, mineral substance, surfactant, polysaccharides can be added to the agent. The agent is suitable for the crops growing in salty soil, and used to immerse seeds, spray seedlings or mix with seeds. The agent is drought-resistant and salt-resistant.

L42 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:545443 CAPLUS
DOCUMENT NUMBER: 135:126914
TITLE: Hair aerosol foams containing thickeners and propellants
INVENTOR(S): Schmenger, Juergen; Abels, Wilhelm; Jahedshoar, Mehrdad
PATENT ASSIGNEE(S): Wella A.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052800	A1	20010726	WO 2001-EP32	20010104
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10002513	A1	20010816	DE 2000-10002513	20000121
AU 2001025131	A5	20010731	AU 2001-25131	20010104
EP 1162938	A1	20011219	EP 2001-900386	20010104
EP 1162938	B1	20031105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

BR 2001004147	A	20020115	BR 2001-4147		20010104
JP 2003520219	T	20030702	JP 2001-552848		20010104
AT 253350	T	20031115	AT 2001-900386		20010104
US 2002197213	A1	20021226	US 2002-937228		20020128
US 6737046	B2	20040518			
PRIORITY APPLN. INFO.:			DE 2000-10002513	A	20000121
			WO 2001-EP32	W	20010104

OTHER SOURCE(S): MARPAT 135:126914

AB A composition for a hair preparation is disclosed, preferably in the form of an optically clear, transparent or translucent product which can be used as an aerosol foam. The composition contains (A) at least one nonionic, amphiphilic associative thickener in a suitable cosmetic base and (B) at least one propellant. The agent can be used as a leave-in hair cure or as a hair rinse for conditioning hair and providing it with shine and volume Thus, a mild hair formulation contained Arquad-1225 0.8, Dow Corning-193 1.0, Pure Thix M 1.0, Rewoteric AMCAS 0.5, and water to 100 g. The composition also contained di-Me ether and F152a.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:7489 CAPLUS
DOCUMENT NUMBER: 134:71036
TITLE: Method for treating cotyledonous plants with chitosan salts for improving growth
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 13,945, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6167652	B1	20010102	US 1999-237065		19990126
PRIORITY APPLN. INFO.:			US 1997-787870	B2	19970123
			US 1998-13945	B2	19980127

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties enjoy an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5% weight chitosan salt using conventional agricultural equipment and techniques.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:314503 CAPLUS
DOCUMENT NUMBER: 132:325816
TITLE: Ethanolic cosmetic preparations containing chitosan
INVENTOR(S): Panzer, Claudia; Tesmann, Holger; Wachter, Rolf
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000025734	A1	20000511	WO 1999-EP8105		19991027
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
DE 19850734	A1	20000511	DE 1998-19850734		19981104
EP 1131040	A1	20010912	EP 1999-971303		19991027
EP 1131040	B1	20041215			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
ES 2235551	T3	20050701	ES 1999-971303		19991027
PRIORITY APPLN. INFO.:			DE 1998-19850734	A	19981104
			WO 1999-EP8105	W	19991027

AB Cosmetic prepns. containing chitosan are rendered compatible with EtOH, e.g. for use in hair sprays or deodorants, by neutralizing with lactic acid, pyrrolidonecarboxylic acid, nicotinic acid, hydroxyisobutyric acid, hydroxyisovaleric acid, and their mixts. Suitable compns. contained EtOH 70-90, chitosan neutralization products 0.01-5, other auxiliaries and additives, and H2O to 100 weight%.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:375432 CAPLUS
DOCUMENT NUMBER: 131:23503
TITLE: Vaccine compositions for mucosal administration comprising chitosan
INVENTOR(S): Makin, Jill Catherine; Bacon, Andrew David
PATENT ASSIGNEE(S): Medeva Europe Limited, UK
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9927960	A1	19990610	WO 1998-GB3534		19981127
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2310718	A1	19990610	CA 1998-2310718		19981127
AU 9915691	A	19990616	AU 1999-15691		19981127
AU 745934	B2	20020411			
EP 1051190	A1	20001115	EP 1998-959998		19981127
EP 1051190	B1	20031001			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001524532	T	20011204	JP 2000-522945		19981127
NZ 504504	A	20020531	NZ 1998-504504		19981127
AT 250937	T	20031015	AT 1998-959998		19981127
NO 2000002741	A	20000526	NO 2000-2741		20000526
US 6534065	B1	20030318	US 2000-583124		20000530
PRIORITY APPLN. INFO.:			GB 1997-25084	A	19971128
			WO 1998-GB3534	W	19981127

AB The invention provides a vaccine composition adapted for mucosal administration; the composition comprising one or more influenza vaccine

antigens and an effective adjuvant amount of an acid addition salt of a chitosan wherein the chitosan is a deacetylated chitin which is at least 80 % deacetylated and has a weight average mol. weight of between 10,000 and 100,000.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:172578 CAPLUS
DOCUMENT NUMBER: 130:227723
TITLE: In situ formation of bioadhesive polymeric material
INVENTOR(S): Dettmar, Peter William; Jolliffe, Ian Gordon; Skaugrud, Oyvind
PATENT ASSIGNEE(S): Reckitt & Colman Products Limited, UK
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909962	A1	19990304	WO 1998-GB2410	19980810
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2328443	A	19990224	GB 1998-17093	19980807
GB 2328443	B	20010905		
CA 2301165	A1	19990304	CA 1998-2301165	19980810
AU 9887389	A	19990316	AU 1998-87389	19980810
AU 737714	B2	20010830		
EP 1007015	A1	20000614	EP 1998-938785	19980810
EP 1007015	B1	20030709		
R: AT, CH, DE, ES, FR, GB, GR, IT, LI, SE				
BR 9811245	A	20000718	BR 1998-11245	19980810
HU 200003602	A2	20010328	HU 2000-3602	19980810
JP 2001513549	T	20010904	JP 2000-507353	19980810
AT 244562	T	20030715	AT 1998-938785	19980810
ES 2198062	T3	20040116	ES 1998-938785	19980810
ZA 9807516	A	19990222	ZA 1998-7516	19980820
MX 200001818	A	20001026	MX 2000-1818	20000221
US 6391294	B1	20020521	US 2000-485771	20000412
PRIORITY APPLN. INFO.:			GB 1997-17626 A	19970821
			GB 1997-17627 A	19970821
			WO 1998-GB2410 W	19980810

AB The invention provides a pharmaceutically acceptable polymeric material formed in situ at a body surface and a process for the preparation of material. The polymeric material is formed by applying an anionic polymer and a cationic polymer to the surface in the presence of water. Thus, an anionic solution contained sodium alginate 2, and methylparaben (preservative) 0.1 g, flavors, sweeteners, and colors q.s. and water to 100 mL. A cationic solution contained chitosan chloride (Seacure CL 211) 0.4 and methylparaben (preservative) 0.1 g, flavors, sweeteners, colors q.s. and water to 100 mL. Dissolve the Me paraben, flavors, sweeteners and colors in the water. Between 0.2 and 1 mL of each solution may be sprayed simultaneously onto the back of the throat to form a soothing protective film. This film is of particular benefit to those suffering from a sore throat.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:519876 CAPLUS
DOCUMENT NUMBER: 129:132548
TITLE: Chitosan salts as crop yield enhancers.
INVENTOR(S): Heinsohn, George E.; Bjornson, August S.
PATENT ASSIGNEE(S): DCV, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832335	A1	19980730	WO 1998-US1331	19980122
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2278301	A1	19980730	CA 1998-2278301	19980122
AU 9862484	A	19980818	AU 1998-62484	19980122
EP 964616	A1	19991222	EP 1998-904665	19980122
EP 964616	B1	20030102		
R: DE, ES, FR, GB, IT, NL, PT, IE				
BR 9806926	A	20000502	BR 1998-6926	19980122
JP 2001507361	T	20010605	JP 1998-532152	19980122
ES 2189133	T3	20030701	ES 1998-904665	19980122
MX 9906833	A	20000531	MX 1999-6833	19990722
PRIORITY APPLN. INFO.:			US 1997-787870 A	19970123
			WO 1998-US1331 W	19980122

AB Application of a water-soluble salt of chitosan to the foliage of growing plants increases the yield of vegetables, tubers, cereal grains, fruits and blossoms. Plants so treated are healthier, sturdier, more resistant to drought and many varieties have an extended period of production The plants may be effectively and conveniently treated by spraying the foliage with a solution containing 0.01-1.5 weight% chitosan salt using conventional agricultural equipment and techniques.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:212475 CAPLUS
DOCUMENT NUMBER: 112:212475
TITLE: Chitosan salts as plant growth regulators
INVENTOR(S): Lewis, Robert E.
PATENT ASSIGNEE(S): Bentech Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 8907395	A1	19890824	WO 1989-US429		19890207
W: AU, BR, DK, FI, JP, NO, SU					
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE					
AU 8931926	A	19890906	AU 1989-31926		19890207
ZA 8901214	A	19891129	ZA 1989-1214		19890216
PRIORITY APPLN. INFO.:			US 1988-158227	A	19880219
			US 1988-251693	A	19880927
			WO 1989-US429	A	19890207

AB Solns. of chitosan salts are applied to crops, in order to enhance protein content of the fruits as well as improve resistance to fungal pathogens and increase the yield. Application may be made by seed treatment, irrigation, root dip or foliar spray. A fixing agent or supplemental treatment is used for seed treatments of all but short-lived plants. Chitosan salt solns. may also be applied to crops for improving freeze protection or for seed priming. Most applications require very low mol.-weight chitosan, obtained by partial oxidative depolymn. of com. chitosan. Foliar spray with 50 ppm chitosan lactate increased the yield and protein content of rice.

L42 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:75976 CAPLUS
DOCUMENT NUMBER: 110:75976
TITLE: Water-soluble chitosan
INVENTOR(S): Kushino, Shigetaka; Asano, Hiroshi
PATENT ASSIGNEE(S): Nitta Gelatine Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63225602	A	19880920	JP 1987-59229	19870313
PRIORITY APPLN. INFO.:			JP 1987-59229	19870313

AB Water-soluble chitosan (I), useful as protein coagulant for medicines and foods, and hair prepns. (no data), was prepared by dehydrating aqueous solns. of salts of I (obtained by reaction of I and acids), then pulverized. Thus, 20 g powdered I was dispersed in 940 mL water, treated with 40 mL 50% aqueous lactic acid to give 2% aqueous solution of I salt, which was evaporated under reduced pressure to 10% concentration, then spray-dried with air at 175° to give water-soluble powdered I. When the powder 15.0 g was added to 100 mL water, it dissolved immediately to give a solution with high concentration

L42 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:572265 CAPLUS
DOCUMENT NUMBER: 87:172265
TITLE: Studies on the utilization of crab shell waste - chitosan as a coagulating agent
AUTHOR(S): Fujita, Takao; Yamauchi, Takafumi; Yanagisawa, Ikuko; Hiroi, Osamu
CORPORATE SOURCE: Cent. Res. Lab., Nippon Suisan Co., Ltd., Tokyo, Japan
SOURCE: Nippon Suisan Kabushiki Kaisha Chuo Kenkyusho Hokoku (1976), 11, 49-55
CODEN: NSKHA2; ISSN: 0369-5735
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB HCHO was sprayed on powdered chitin prepared from king crab shell to obtain chitosan salt containing H2O 10 and HCHO 18%, which was used for coagulation of clay suspension, wastewater from processing of ground fish meat, and activated sludge. In the coagulation test of clay

suspension with 0.1-20 ppm chitosan, the coagulation and settling of clay particles were accelerated with increasing chitosan salt . The chitosan salt also had good coagulation effect for wastewater from ground fish meat processing and activated sludge.

L42 ANSWER 23 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2004039752 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14738587
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: The Journal of pharmacy and pharmacology, (2003 Dec) Vol. 55, No. 12, pp. 1623-7.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200403
ENTRY DATE: Entered STN: 24 Jan 2004
Last Updated on STN: 31 Mar 2004
Entered Medline: 30 Mar 2004

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the physical mixtures at pH 5.5 and 7.4. In-vitro release of vancomycin was retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

L42 ANSWER 24 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2003477091 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14553988
TITLE: Alkaline chitosan solutions.
AUTHOR: Muzzarelli Corrado; Tosi Giorgio; Francescangeli Oriano; Muzzarelli Riccardo A A
CORPORATE SOURCE: Institute of Biochemistry, Faculty of Medicine, Polytechnic University of Marche, Via Ranieri 67, IT-60100 Ancona, Italy.
SOURCE: Carbohydrate research, (2003 Oct 10) Vol. 338, No. 21, pp. 2247-55.
Journal code: 0043535. ISSN: 0008-6215.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200407
ENTRY DATE: Entered STN: 15 Oct 2003
Last Updated on STN: 29 Jul 2004
Entered Medline: 28 Jul 2004

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solutions into saturated ammonium hydrogen carbonate. Incubation at 20 degrees C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO(2)(-)NH(4)(+) a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, molecular sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate and lactate salts. Their

hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solutions at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 degrees C). Citrate could cross-link chitosan and impart insolubility to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH(4)HCO(3) treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solutions of mixed chitosan carbamate and alginate were spray-dried at 115 degrees C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 micron.

L42 ANSWER 25 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2003320948 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12851047
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying.
AUTHOR: Cerchiara T; Luppi B; Bigucci F; Petrachi M; Orienti I; Zecchi V
CORPORATE SOURCE: University of Bologna, Department of Pharmaceutical Sciences, Via S. Donato 19/2, 40127 Bologna, Italy.
SOURCE: Journal of microencapsulation, (2003 Jul-Aug) Vol. 20, No. 4, pp. 473-8.
Journal code: 8500513. ISSN: 0265-2048.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200311
ENTRY DATE: Entered STN: 10 Jul 2003
Last Updated on STN: 18 Dec 2003
Entered Medline: 26 Nov 2003

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate (CH-Asp), chitosan glutamate (CH-Glu) and chitosan hydrochloride (CH-HCl) were prepared by freeze-drying and coated with stearic, palmitic, myristic and lauric acids by spray -drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behaviour of vancomycin hydrochloride from the freeze-dried and spray -dried systems at pH 2.0 and 7.4.

L42 ANSWER 26 OF 26 MEDLINE on STN
ACCESSION NUMBER: 2002257824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11996810
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery.
AUTHOR: Orienti I; Cerchiara T; Luppi B; Bigucci F; Zuccari G; Zecchi V
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Via S. Donato 19/2, 40127, Bologna, Italy.. orienti@biocfarm.unibo.it
SOURCE: International journal of pharmaceutics, (2002 May 15) Vol. 238, No. 1-2, pp. 51-9.
Journal code: 7804127. ISSN: 0378-5173.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 9 May 2002
Last Updated on STN: 28 Jun 2002
Entered Medline: 27 Jun 2002

AB Chitosan (CH) was dissolved in aqueous solutions containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solutions by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behaviour of SD from the physical mixture during gastrointestinal transit. The physical mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with beta-glucosidase at pH 7.0 enhanced the release rate. Among the CH salts used, glutamic and aspartic salts provided the best control of release.

L42 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L42 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1058021 CAPLUS
DOCUMENT NUMBER: 142:43406
TITLE: Hair preparations containing fluorescent nanoparticle compositions
PATENT ASSIGNEE(S): Wella AG, Germany
SOURCE: Ger. Gebrauchsmusterschrift, 34 pp.
CODEN: GGXXFR
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 202004012607	U1	20041209	DE 2004-202004012607	20040812
PRIORITY APPLN. INFO.:			DE 2004-202004012607	20040812

AB The invention concerns hair prepns. that contain composite nanoparticles that are prepared from a metal or non-metal core and an organic polymer shell; the nanoparticles are fluorescent. Cores are formed preferably from an oxide ceramics; the polymer coating itself can be fluorescent. There can be a layer between the core and the shell that is composed of polyarom. fluorescence substances. The nanocomposites can be prepared by plasma technol. The nanoparticles are included in the hair prepns. along with hair care substances, polysiloxanes, thickening agents, sunscreens, preservatives, non-fluorescent hair dyes, surfactants, oxidants, and reducing substances. Thus a hair styling cream contained (weight/weight%): PMMA-Fe2O3 0.50; hdyroxyethylcellulose 0.10; carbomer 0.50; propyleneglycol 1.50; methylparaben 0.20; aminomethylpropanol 0.39; polyvinylpyrrolidone 1.50; glycerin 1.00; water to 100.

L42 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1015840 CAPLUS
DOCUMENT NUMBER: 141:428027
TITLE: Method for producing a chitosan-bound salt with antihypertensive activity
INVENTOR(S): Cho, Gun Sik; Kim, Gye Yeop; Ham, Kyung Sik; Park, Hyun Jin; Kim, In Cheol
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004100681	A1	20041125	WO 2004-KR410	20040227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004099587	A	20041202	KR 2003-31616	20030519
EP 1631155	A1	20060308	EP 2004-715573	20040227
R: DE, ES, FR, GB, IT				
JP 2006518190	T	20060810	JP 2005-518455	20040227

US 2005232999	A1	20051020	US 2004-518419		20041217
PRIORITY APPLN. INFO.:			KR 2003-31616	A	20030519
			WO 2004-KR410	W	20040227

AB The present invention relates to a method for producing a chitosan-bound salt having the function of lowering blood pressure. The method comprises the steps of: (a) dissolving an acid-soluble chitosan in organic acid, or dissolving a water-soluble chitosan derivative in water, to prepare a chitosan solution; (b) spraying the chitosan solution on salt particles to bind the chitosan to the salt particles; and (c) drying the chitosan-bound salt particles. The chitosan or its derivative is bound to the salt particles by spraying or mixing such that the chitosan-containing salt can be produced without performing a recrystg. step.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:999284 CAPLUS
DOCUMENT NUMBER: 142:279143
TITLE: Process for producing salted fish with seaweeds powder, mugwort extract, green tea extract and chitosan solution
INVENTOR(S): Kim, Deuk Gi
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003094199	A	20031211	KR 2003-83704	20031124
PRIORITY APPLN. INFO.:			KR 2003-83704	20031124

AB A process for producing a salted fish with seaweeds powder, a mugwort extract, a green tea extract and a chitosan solution is provided, thereby preventing adult diseases, removing fishy smell, and preserving freshness of the fish for a long time. The process comprises the steps of: washing and removing internal organs of fish; spraying salts on the fish; spraying seaweeds powder on the surface of the fish; maturing the salted and seaweeds powder sprayed fish; and packaging the matured fish under vacuum condition, wherein the seaweeds include tangleweed, brown seaweed and brown algae; the matured fish may be further dipped in mugwort or green tea extract; the matured fish may be further coated with a chitosan solution

L42 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:869406 CAPLUS
DOCUMENT NUMBER: 142:154620
TITLE: Manufacturing method of new functional salt and development of use thereof
INVENTOR(S): Cho, Kun Sik; Ham, Gyeong Sik; Jung, Sun Taek; Kim, In Cheol; Park, Hyeon Jin
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2001000706	A	20010105	KR 2000-60499	20001006

PRIORITY APPLN. INFO.: KR 2000-60499 20001006

AB A manufacturing method of new functional salt and development of use thereof are provided, which has effects of decreasing blood pressure and antibiosis, by stirring salt and α-chitosan after dissolving salt to be 20-23% of the saturated solution New functional salt contains 0.1-5% of chitosan dissolved in a salt solution and chitosan is dried and crystallized α-chitosan is obtained from shells of crab and shrimp and β-chitosan is obtained from squids. The mol. weight of the chitosan is 1,000-1,000,000 MW for proper adhesive capacity with a chloride ion of salt. The content of the chitosan is 0.05-10%, particularly, 0.5-5%. The chitosan is dissolved in water or an organic solution and mixed with salt to make a chitosan salt solution For making 1% of the chitosan salt solution, 20-23% of natural salt is dissolved and stirred with 1% of the chitosan solution for 30-90 min. The chitosan salt solution is spray-dried or concentration-dried to recrystd. the salt having the chitosan.

L42 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:829916 CAPLUS
DOCUMENT NUMBER: 142:448486
TITLE: Structural characteristics and sorption ability of chitosan microgranules
AUTHOR(S): Adamiec, Janusz; Modrzejewska, Zofia
CORPORATE SOURCE: Wydz. Inz. Procesowej i Ochrony Srodowiska, Politech. Lodzka, Lodz, 90-924, Pol.
SOURCE: Inzynieria Chemiczna i Procesowa (2004), 25(3/1), 543-548
CODEN: ICPRDT; ISSN: 0208-6425
PUBLISHER: Oficyna Wydawnicza Politechniki Wroclawskiej
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB Microgranules were formed by means of spray drying of two chitosan salts: acetate and ascorbate. To reduce solubility, glutaraldehyde and sodium triphosphate were added to the solution Dry microgranules as a product of different chemical composition had different structural characteristics: shape, size, d., and volume, and area of pores. Sorption ability of these microgranules was investigated by measuring the sorption of benzene and carbon dioxide (in a highly-vacuum sorptive instrument).

L42 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:77658 CAPLUS
DOCUMENT NUMBER: 141:42688
TITLE: Chitosan salts as nasal sustained delivery systems for peptidic drugs
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Bologna, 40127, Italy
SOURCE: Journal of Pharmacy and Pharmacology (2003), 55(12), 1623-1627
CODEN: JPPMAB; ISSN: 0022-3573
PUBLISHER: Pharmaceutical Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to describe a sustained drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan lactate, chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by spray-drying technique. Vancomycin hydrochloride was used as a model peptidic drug, the nasal sustained release of which should avoid first-pass metabolism in the liver. This in-vitro study evaluated the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the phys. mixts. at pH 5.5 and 7.4. In-vitro release of vancomycin was

retarded by chitosan salts and, in particular, chitosan hydrochloride provided the lowest release of vancomycin.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795160 CAPLUS
DOCUMENT NUMBER: 140:43678
TITLE: Alkaline chitosan solutions
AUTHOR(S): Muzzarelli, Corrado; Tosi, Giorgio; Francescangeli, Oriano; Muzzarelli, Riccardo A. A.
CORPORATE SOURCE: Faculty of Medicine, Institute of Biochemistry, Polytechnic University of Marche, Ancona, IT-60100, Italy
SOURCE: Carbohydrate Research (2003), 338(21), 2247-2255
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rigid and transparent hydrogels were obtained upon pouring chitosan salt solns. into saturated ammonium hydrogen carbonate. Incubation at 20 °C for 5 days yielded chitosan carbamate ammonium salt, Chit-NHCO2-NH4+ a chemical species that either by hydrolysis or by thermal treatment decomposed to restore chitosan in free amine form. Chitosans of different degrees of acetylation, mol. sizes and origins (squid and crustaceans) were used as hydrochloride, acetate, glycolate, citrate, and lactate salts. Their hydrogels obtained in ammonium hydrogen carbonate yielded chitosan solns. at pH values as high as 9.6, from which microspheres of regenerated chitosans were obtained upon spray-drying. These materials had a modest degree of crystallinity depending on the partial acylation that took place at the sprayer temperature (168 °C). Citrate could cross-link chitosan and impart insoly. to the microspheres. Chloride on the contrary permitted to prepare microspheres of chitosan in free amine form. By the NH4HCO3 treatment, the cationicity of chitosan could be reversibly masked in view of mixing chitosan with alginate in equimolar ratio without coacervation. The clear and poorly viscous solns. of mixed chitosan carbamate and alginate were spray-dried at 115 °C to manufacture chitosan-alginate microspheres having prevailing diameter approx 2 μ.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:566810 CAPLUS
DOCUMENT NUMBER: 140:64869
TITLE: Controlled release of vancomycin from freeze-dried chitosan salts coated with different fatty acids by spray-drying
AUTHOR(S): Cerchiara, T.; Luppi, B.; Bigucci, F.; Petrachi, M.; Orienti, I.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: Journal of Microencapsulation (2003), 20(4), 473-478
CODEN: JOMIEF; ISSN: 0265-2048
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to describe a controlled drug release system based on chitosan salts for vancomycin hydrochloride delivery. Chitosan aspartate, chitosan glutamate and chitosan hydrochloride were prepared by freeze drying and coated with stearic, palmitic, myristic and lauric acids by spray-drying technique. Vancomycin hydrochloride was used as a peptidic model drug whose sustained

release should minimize its inactivation in the upper part of the gastrointestinal tract. This study evaluated, in vitro, the influence of chitosan salts on the release behavior of vancomycin hydrochloride from the freeze-dried and spray-dried systems at pH 2.0 and 7.4.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:658743 CAPLUS
DOCUMENT NUMBER: 137:190771
TITLE: Chitosan-containing solution for prophylactic treatment of teats of lactating animals
INVENTOR(S): Hellman, Asa; Mathisen, Torbjorn
PATENT ASSIGNEE(S): Swed.
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002119949	A1	20020829	US 2001-791739	20010226
CA 2439465	A1	20020906	CA 2002-2439465	20020225
WO 2002067952	A1	20020906	WO 2002-SE318	20020225
WO 2002067952	A8	20040521		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1372672	A1	20040102	EP 2002-700937	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007531	A	20040309	BR 2002-7531	20020225
JP 2005508835	T	20050407	JP 2002-567318	20020225
PRIORITY APPLN. INFO.:			US 2001-791739 A	20010226
			WO 2002-SE318 W	20020225

AB An aqueous solution for prophylactic treatment of teats of lactating cows comprises as a first component at least partially deacetylated chitosan or its acid addition salt in a concentration of up to about 2% by weight of chitosan. A pH solution of the solution is adjusted to about 4-6.8 by the addition of a mineral or organic acid. The first component has a mol. weight such that the viscosity of the solution is < 50 mPas. The aqueous solution further comprises a second component selected from heparin, heparan sulfate, and dextran sulfate, the weight ratio between the first and second components being from about 10:1 to about 100:1. For example, 5.8 g 87% glycerol was added to 95 mL of water and 0.3 mL acetic acid (99.9%) was added to the glycerol solution under stirring until a homogeneous solution was obtained. To the solution prepared was then added 1.0 g chitosan (MW of about 80 kD, deacetylation degree 94% (Primex)) and stirring was maintained until all chitosan has been dissolved. The pH of this solution was about 5.2. The solution showed improved stability and resulted in a viscosity lying within the preferred range and

enabling easy handling in connection with the application to the teats.

L42 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:335241 CAPLUS
DOCUMENT NUMBER: 138:175642
TITLE: Influence of different chitosan salts on the release of sodium diclofenac in colon-specific delivery
AUTHOR(S): Orienti, I.; Cerchiara, T.; Luppi, B.; Bigucci, F.; Zuccari, G.; Zecchi, V.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40127, Italy
SOURCE: International Journal of Pharmaceutics (2002), 238(1-2), 51-59
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chitosan (CH) was dissolved in aqueous solns. containing aspartic, glutamic, hydrochloric, lactic and citric acids to obtain different chitosan salts. Chitosan salts were collected from the solns. by spray-drying and the powders obtained were mixed with Sodium Diclofenac (SD), taken as a model anti-inflammatory drug. This study evaluated in vitro the influence of acid type on the release behavior of SD from the phys. mixture during gastrointestinal transit. The phys. mixture of the chitosan salts with SD provided slower drug release than the pure drug both in acidic and alkaline pHs. In addition, the interaction with β-glucosidase at pH 7.0 enhanced the release rate. Among the chitosan salts used, glutamic and aspartic salts provided the best control of release.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:123584 CAPLUS
DOCUMENT NUMBER: 136:184114
TITLE: Preparation of therapeutic water-soluble salts of 2-difluoromethyl-2,5-diaminopentanoic acid and polycations
INVENTOR(S): Hebert, Rolland F.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002019338	A1	20020214	US 2001-919692		20010731
US 6630511	B2	20031007			
US 2004006045	A1	20040108	US 2003-614713		20030707
PRIORITY APPLN. INFO.:			US 2000-222420P	P	20000801
			US 2001-919692	A3	20010731

AB Water-soluble salts of 2-difluoromethyl-2,5-diaminopentanoic acid (DFMO) with polycations (e.g., 80% deacetylated chitosan) are prepared and their therapeutic uses described.

L42 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:781455 CAPLUS
DOCUMENT NUMBER: 135:335172
TITLE: Therapeutically improved salts of azelaic acid
INVENTOR(S): Hebert, Rolland F.

PATENT ASSIGNEE(S): Hebert, Rolland, USA
SOURCE: U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001034321	A1	20011025	US 2001-791358	20010223
US 6734210	B2	20040511		

PRIORITY APPLN. INFO.: US 2000-184750P P 20000224

AB Stable salts of azelaic acid with polycations such as chitosan are described. The salts according to the invention are water-soluble, therapeutically more efficacious and are valuable for use as active constituents in pharmaceutical as well as cosmeceutical compns. A salt was prepd, by the reaction of azelaic acid with chitosan. A 20% cream prepared from the above salt was applied to the fore-arm of 10 individuals. After 2 wk, no redness, irritation or scaling was observed

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d his

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     FILE 'CAPLUS, MEDLINE' ENTERED AT 11:44:08 ON 04 JAN 2007
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L4            9 S CHITOSAN? (P) SALT? (P) SPRAY? (P) WATER? (P) DRIED
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L6            2 S CHITOSAN? (P) SALT? (P) BLOOD PRESSURE (P) SPRAY?
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L9           77 S CHITOSAN? (P) ?SALT? (P) SPRAY?
L10          31 S CHITOSAN? (P) ?SALT? (P) SPRAY? (P) DRY?
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L14           2 S L12 AND BIND?
L15          45 S L12 AND ON SALT?
L16           0 S L12 AND "ON SALT"
L17           0 S L12 AND "SPRAYING CHITOSAN"
L18           0 S L12 AND "SPRAYING THE CHITOSAN"
L19           0 S L12 AND "SPRAYED THE CHITOSAN"
L20          10 S L12 AND CHITOSAN-SALT?
L21          35 S L15 NOT L20
L22          36 S L12 NOT L20
L23         333 S CHITOSAN-CONTAIN?
L24           0 S CHITOSAN-CONTAIN? SALT?
L25           0 S ?CHITOSAN-CONTAIN? SALT?
L26           1 S ?CHITOSAN-SALT? (P) BLOOD PRESSURE?
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L29           0 S ?SALT? CONTAIN? CHITOSAN?
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L32           0 S ?CHITOSAN-SALT COMPO?
L33           0 S ?CHITOSAN-SALT MIXTURE?
L34         182 S ?CHITOSAN-LACTATE?
L35          15 S L34 AND SPRAY?
L36           4 S L35 AND DRY?
L37           4 S L35 AND DRIED
L38          11 S L35 NOT L36
L39           8 S L38 NOT L37
L40         330 S ?CHITOSAN-SALT?
L41           2 S L40 AND SALT PARTICLES?
L42          26 S L40 AND SPRAY?
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